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NANUTSET ch'u Q'udi Gu
BEFORE OUR TIME AND NOW
AN ETHNOHISTORY OF LAKE CLARK NATIONAL PARK & PRESERVE

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As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural and cultural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for enjoyment of life through outdoor recreation.

The Cultural Resource Programs of the National Park Service have responsibilities that include stewardship of historic buildings, museum collections, archeological sites, cultural landscapes, oral and written histories, and ethnographic resources.

Our mission is to identify, evaluate, and preserve the cultural resources of the park areas and to bring an understanding of these resources to the public. Congress has mandated that we preserve these resources because they are important components of our national and personal identity.

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Front Cover: Katherine Constantine at Qeghnilen Village in 1930. Photo courtesy of Nickoli Balluta. George Koktelash Sr.'s fishcamp at Nondalton. Salmon drying on rack for smoked fish, 2006. Photo taken by Judy Putera.

Agafia Simeon O'Hara cuts fall fish at Pile Bay on Iliamna lake in 1952. Her husband Tom O'Hara gathers fish in the skiff. Photo courtesy of Vantrease and Wilder families.

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Sockeye salmon strips drying on fish rack at Evanoff's fish camp located below Nondalton. Photo by Judy Putera.

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Gustingen Constantine, Katherine Constantine and Anisha Constantine (left to right) 1930 at Oeghnilen Village on the Stony River. NPS photo H451, courtesy of Sophie Balluta Austin.

EXECUTIVE SUMMARY

Alaska Natives have lived in south central Alaska for thousands of years. Historic and current residents are primarily Dena'ina, with some Yup'ik speaking peoples along the southern and western shores of Iliamna Lake. The Dena'ina who reside in the general region of Lake Clark National Park and Preserve have occupied countless settlement sites, journeyed along rivers and through high passes, hunted across vast territories, fished from rivers and lakes, and gathered subsistence materials from tundra and forests in the region for hundreds of years. Dena'ina settlement areas range across territories that include permanent homes, as well as seasonally occupied fish camps and hunting camps along the shores of Lake Clark and Lake Iliamna, the two largest bodies of water in the area, and their many tributaries. Settlements also extended along stretches of the Upper Stony and Mulchatna Rivers. Even though these rivers are largely outside of the current park boundaries, their sources, and related hunting grounds spread across what are now park lands. People who settled along the coastal areas also have links to what is now Lake Clark National Park and Preserve.

Around a thousand years ago, inland Dena'ina in the Mulchatna River, Stony River, and Lake Clark and Lake Iliamna regions shifted from a subsistence pattern that was primarily based on nomadic caribou hunting to one more settled at river mouth areas, and focusing on trapping fish in weirs (Boraas 2005). Although salmon remain a central nutritional and symbolic element of Dena'ina culture, many other fish, land mammals, birds, and dozens of species of plants contribute to the overall subsistence lifestyle. Shifts in technology and constant movement to more advantageous resources have been constant, but the reliance on a subsistence way of life has been a thread of continuity up to the present.

Dena'ina social organization was and still is linked to kinship. Historically, Dena'ina recognized matrilineal clans, tracing descent through the women of the families. *Qeshqa* were leaders, usually male, who held prestige, helped organize hunting and fishing, assisted in dividing resources among the community, and helped to provide protection. Potlatches continue to be important gatherings, marking death, marriage or other significant events, and serving as a venue for sharing resources as well as visiting.

The Dena'ina lived in a world that was vibrantly alive with spirits who resided in rocks, glaciers, animals and trees. They developed a code of conduct that was carefully tuned to these mystical forces, and worked to live in balance with a constantly changing environment.

Contact with first Russian traders, and later American gold prospectors and eventual booming industries in commercial fishing and oil have rapidly and radically changed Dena'ina culture. The Russian Orthodox religion became integrated with Dena'ina spiritual beliefs to form new combinations. Schools taught children English language and sought to eradicate the use of Native languages. Schools also affected traditional subsistence patterns of annual travel of entire families to fishing, hunting and trapping camps, and led to more sedentary village life.

In recent years, many Dena'ina people interested in learning or strengthening their knowledge of the Dena'ina language have helped to initiate various language revitalization efforts. Cultural revitalization is supported through language study and use, and through summer culture camps held in many of the communities.

Lake Clark National Park and Preserve seeks to consult with and partner with members of Resident Zone Communities and other associated communities around the Park and Preserve. A Community Contacts Guide has been developed to help offer other agencies, companies and interested others guidance for contacting and consulting with these communities (NPS 2007).

This history of occupation and use, contemporary settlements around park edges, and continued subsistence use of lands in the Park and Preserve are often not so visible to outside visitors. The Park seeks to develop materials to document past and current cultural heritage, and to protect the material and structural remains of those cultures. This Ethnohistory is meant to serve as a resource for community residents, park managers, and the greater public.

Hamushka Zackar and Gabriel Tefron dressed for potlatch ceremony in Nondalton circa 1960. Photo courtesy of Agnes Cusma.

ACKNOWLEDGEMENTS

Many people contributed to this project. Jeanne Schaaf, Chief of Cultural Resources for Lake Clark National Park and Preserve, had the vision to undertake an ethnohistorical study, and set me to the task with encouragement and faith. No one could be more committed to the cultural resources of our national parks, or work harder to protect them, than Jeanne Schaaf. Joel Hard, as Superintendent of Lake Clark National Park and Preserve, has been a supportive voice for the Cultural Resources program, and for this project, and is an invaluable asset to the park. John Branson, the historian for Lake Clark National Park and Preserve, is a walking archive. He holds a wealth of knowledge about the Dena'ina people based on several decades of living near and working with them. John's attention to detail is unsurpassed, and he is one of our greatest resources on the cultural history of this area. Mary McBurney in the Subsistence Program has provided keen perception on a number of issues. Barbara Bundy very capably made the maps and illustrations for the project, and many others on the Lake Clark staff have supported the work.

In the NPS Alaska Support Office, Don Callaway offered a depth of understanding based on years of working in the region that I did not have as a newcomer. Don has also provided economic and subsistence data that strengthens the overall study. Samson Ferreira, with the Cultural Landscapes program, conducted Cultural Landscape Inventories for in the Park and Preserve, and discussions with him helped advance the work of this project. Dave Krupa, anthropologist at Yukon-Charley Rivers and Gates of the Arctic, read and commented thoughtfully on drafts of the project as well.
Rachel Mason, cultural anthropologist at the Alaska Regional office of the National Park Service, has considerable knowledge of Alaska Natives all over the state. With remarkable enthusiasm and energy, she took on the final editing of this document, with Karen Stickman. Without their skillful editing, and breadth of ethnographic knowledge, it is hard to imagine that the project would ever have been completed. I owe them a debt of gratitude.

Primarily, this project was possible due to the immense efforts of Dena'ina people to record and pass on their cultural traditions. Andrew Balluta has contributed immeasurably to the documentation and preservation of Dena'ina culture and language. Every day I read materials in which he was present. He helped to conduct many oral history interviews, and he was interviewed, alone or with others, numerous times himself. He assisted James Kari and others in the translation of countless transcripts, painstakingly listening to conversations and stories over and over, offering not only scrupulous attention to detail in language use, but also careful interpretation of meanings. Andrew worked closely with Linda Ellanna for many years on the earlier Sociocultural Study of the Nondalton area (1986) and on the subsequent *Nuvendaltin*: The People of Nondalton (1992). He has worked closely with Dena'ina people who have dedicated themselves to learning the Dena'ina language, and attends workshops and classes, offering constant tutoring in Dena'ina language. He has identified individuals in historic photos from all over the Lake Clark region. Andrew's legacy will carry far into the future as Dena'ina people continue to remember and build from their cultural heritage.

Many other elders have made large similar contributions in cultural and linguistic preservation. These knowledgeable people include Helen Dick, Pete Bobby, Katherine Bobby and others in Lime Village; and Mary Hobson, Harry Balluta, Mary Delkittie, Gladys Evanoff, Alec Balluta and George Alexi in Nondalton.

Additionally, a number of dedicated women, men and young people apply their energies to living, learning and preserving particular elements of Dena'ina traditions. These are perhaps too numerous to list, but all of the teachers of Dena'ina, including Pauline Hobson, Butch Hobson, Marilyn Balluta, Liz Balluta, Shauna Sagmoen, Michelle Ravenmoon, and others are essential links to the continued viability of the Dena'ina language. Without them, Dena'ina language and culture would slip away within a generation. The young students are equally essential, as are parents who teach their children Dena'ina from the earliest age.

Dena'ina people's interest in preserving and recording their language and culture was met with a parallel interest on the part of a number of researchers over the years. James Kari had the vision to learn about, record, and preserve Dena'ina language many decades ago. His diligent work on the noun dictionary, multiple place-name projects, and numerous other linguistic and ethnographic efforts provide a solid foundation from which many others have worked. Without James Kari, most of what is presented here would have been impossible. He has been a dedicated recorder of Dena'ina language, but more than that, Jim loves and appreciates the beauty and subtlety of the language, and the people who have long lived on these vast lands. Priscilla Russell contributed countless interviews with elders, particularly in the Lime Village and Stony River areas, as well as several valuable publications on Dena'ina resource use. Alan Boraas has worked closely with Dena'ina speakers for decades, and has taught Dena'ina classes. He has also contributed a great deal to our understanding of Dena'ina prehistory and history, and he authored a chapter in this study.

I have had the pleasure of working on two cooperative projects with anthropologists James Fall, Davin Holen and Ronald Stanek in the Subsistence Division at the Alaska Department of Fish and Game (ADF&G). Fall and Stanek have decades of experience and knowledge between them in many of the villages linked with Lake Clark National Park and Preserve. James Fall read early and very rough drafts of the chapters for this study, offering helpful guidance and suggestions. I have learned a great deal from all of these ADF&G colleagues, and have enjoyed working with them. Their study of Dena'ina people of the West Cook Inlet area is a companion to this one.

In the summer of 2004, I was extremely fortunate to have Michelle Ravenmoon, who is Dena'ina and is from the Lake Iliamna area, work with me on the ethnohistorical study. Michelle's existing knowledge, insatiable interest, and diligent work helped the project immensely. I learned a great deal from her, and I know she will continue to work with cultural preservation and language revitalization with Dena'ina. Her essay on Dena'ina and aviation is included in this study.

Gary Holton and others at the Alaska Native Language Center have played an important role in facilitating the teaching and learning of Dena'ina. They secured funding to support a series of summer classes on Dena'ina, and they have worked to digitally archive Dena'ina materials means greater accessibility and long-term preservation of the recordings. Gary co-authored an earlier version of chapter 7.

Karen Stickman of first the Native American Fish and Wildlife Society, and then as President of Kijik Corp has offered continual, insightful and gentle guidance. She now serves as the cultural anthropologist for Lake Clark National Park and Preserve, and the park is fortunate to have her perspectives in this position. Donita Peter served as an important consultant in the West Cook Inlet Ethnographic Overview and Assessment. She provided me with a wealth of information and insights, and offered encouragement and friendship.

John Ross and others at the Alaska Native Heritage Center have been generous with their time, knowledge, and the facilities at the Center. The work there is also an important element in cultural preservation for not only Dena'ina, but all Native groups in Alaska. We appreciate the open and collaborative spirit that we have found in this organization and in others.

Overall, we all owe a debt of thanks to the foresight and effort of all the people who worked to record and preserve Dena'ina cultural heritage over the past several decades. It was an honor and a joy to read and listen to stories from the past, to smile at people's sense of humor, and marvel at the beauty of their voices and their knowledge of the world around them. We peered into thousands of photos and slowly pieced together a sense of those individuals' relationships to their lands and to one another. Hopefully this document will offer an overview of the Dena'ina people associated with Lake Clark National Park and Preserve that will contribute to deeper understandings, more sensitive management [illegible]s, and collaboration for years to come.

THE DENA'INA SOUND SYSTEM AND ALPHABET

The Dena'ina alphabet can be displayed in a chart that indicates how and where in the mouth the sounds are produced. Many sounds, such as the glottalized consonants which are written with a following apostrophe, have no English equivalents.

The Dena'ina Sound System
Upper Inlet dialect

Consonants	Place of Articulation							
Manner of Articulation	Labial	Alveolar	Lateral	Alveo-Palatal	Palatal	Front Velar	Back Velar	Glottal
Stops								
plain	b	d	dl	dz	(j)	g	gg	'
aspirated	t	tl	ts	(ch)	k	q		
glottalized		t'	tl'	ts'	(ch')	k'	q'	
Fricatives								
voiced			l	z	(zh)	(ŷ)	gh	
voiceless			ł	s	(sh)	(x)	h	hh
nasals and glides	m	n			y			
Vowels								
long	i	a	u					
short		e						

As noted on the chart in parentheses, there are several sounds that are found in the other Dena'ina dialects that are not distinct in the Upper Inlet dialect These are: **dz** vs. **j**, **ch** vs. **ts**, **ch'** vs. **ts'** and **s** vs. **sh**. Upper Inlet speakers favor the palatal (ch, j) pronunciation. Upper Inlet also lacks the front velar fricatives, y and x. We have adopted the convention for the Dena'ina language of spelling words in Upper Inlet with the sounds that are found in the other dialects.

Cotton grass blowing in the field, above the Mulchatna River.
Photo by Erin McKittrick.

CHAPTER ONE

Introduction: Lake Clark National Park and Preserve Ethnohistory

LAKE CLARK NATIONAL PARK AND PRESERVE AND LOCAL RESIDENTS

The presence of indigenous people in and around established national park areas has meant the need for management practices that can address the complexity of cultural histories and lifeways with sensitivity and intelligence. The National Park Service aims to rise to this challenge. Cultural anthropologists and other cultural resource specialists such as archeologists and historians endeavor to understand and bring to light the lives of local residents and their historic ties to park lands.

One of the younger parks in the country, Lake Clark National Park and Preserve was established on December 2, 1980, by section 201 (7)(a) of the Alaska National Interest Lands Conservation Act (ANILCA). [1] The park area, consisting of over four million acres, includes the jagged intersection of the Alaskan and Aleutian mountain ranges, with a dynamic combination of glaciers and active volcanoes. The area features glacially carved lakes and related complexes of drainages spilling mostly to the southwest into Bristol Bay, and it supports the world's largest runs of sockeye salmon (*Oncorhynchus nerka*), which is significant in the global salmon market. ANILCA's mandate for Lake Clark National Park and Preserve is the preservation of all of these natural features, including sockeye salmon habitat, as well as the scenic beauty of the area, including sharp mountains, clean rivers, turquoise mountain lakes, lush tundra, and lowland grassy marshes (ANILCA 1980). Title VIII of ANILCA also provided for the continued use of these lands by Natives and other rural residents who had traditionally used them for subsistence purposes prior to the establishment of the park.

The Alaska National Interest Lands Conservation Act (ANILCA) specified Resident Zone Communities associated with Lake Clark National Park and Preserve, which have subsistence rights within the park. For Lake Clark, these are the villages of Iliamna, Lime Village, Newhalen, Nondalton, Pedro Bay and Port Alsworth. Other villages or settlements in the region which have not been identified as resident zone communities, but which also have cultural ties to the area, include Tyonek and Stony River, as well as Kenai and Soldotna across Cook Inlet, Pope-Vannoy Landing, and Igiugig and Kokhanok near the south shore of Lake Iliamna.

The majority of the residents of these villages are Dena'ina, an Athabascan-speaking people, but there is a mix of various ethnicities throughout the area.[2] While Nondalton and Lime Village are primarily Dena'ina, Newhalen is primarily Yup'ik speaking. Iliamna is home to Dena'ina, Yup'ik, Euroamerican and other ethnic groups. Port Alsworth has a large Euroamerican base, and a unique history of developing around mining and trapping interests, but has also been home to a core of Dena'ina families from the north. Dena'ina, Alutiiq, Yup'ik and other groups have, of course, interacted with one another over the centuries, through warfare as well as trading and peaceable exchanges (See Chapter 3 for a more detailed discussion) . Following contact with Russians and Americans, members of these Native communities interacted with and intermarried with those outsiders as well. English is primarily spoken throughout the area now, but there are still Dena'ina and Yup'ik speakers in these rural areas as well. This study addresses Dena'ina culture and history, for the most part, but also considers Yup'ik and Euroamerican presences in the area, and the intersection of these various cultural traditions with one another.

In order to most effectively consult with these various communities in and around Lake Clark National Park and Preserve, a Community Contacts Guide has been developed by the NPS Applied Anthropology program (NPS 2007). This document offers guidance for anyone seeking to consult with park-related communities about ongoing research projects, management decisions, possibilities for partnerships and collaboration, and more. The Community Contacts Guide offers a description

[1] ANILCA is 94 Stat. 2383; Public Law 96-487.

[2] Dena'ina is a variation of "Tanaina" which refers to Athabascan speaking peoples around the Cook Inlet area. There are several spellings of the name (Townsend 1981:623); Dena'ina is now the preferred form. Osgood notes that the word Tanaina means "people," which people used to refer to themselves in juxtaposition to other Natives, Europeans and others (1937:15). On the name and spelling of "Athabascan" see: http:/www.uaf.edu/anlc/athabascan.html

of government-to-government relationships and the consultation process. It offers an overview of municipal, tribal, and Native entities, and specific contact information for these entities in each of the Resident Zone Communities, as well as other associated communities. Maps of each village are also included. The Community Contacts Guide is available from the National Park Service, and will be regularly updated as new contact information becomes available.

The current land status division of lands in and around Lake Clark National Park and Preserve is a complicated quilt of various kinds of land ownership (Figure 1). There are homesteads, Native allotments, lands and subsurface rights claimed by village or regional Native corporations, and navigable waters controlled by the state. Prior to these divisions, and for many years into the distant past, lands that now make up Lake Clark National Park and Preserve were occupied by communities of people who settled primarily on the shores of lakes, along rivers, and at the confluence of rivers and streams.

SHARED ELEMENTS OF DENA'INA CULTURE

The Dena'ina, perhaps more than a thousand years ago, relied most on fish and large land mammals such as caribou, but also on a variety of smaller animals, birds and plants. Around a thousand years ago, archeologist Alan Boraas suggested, a warming trend caused an increase in salmon runs (see also Boraas 2002a, 2002b). Dena'ina of that time developed fish weir technologies that meant a shift from primary reliance on land mammals to a primary dependence on fish. This shift led to more sedentary settlements at the mouth of streams. Putting up salmon—smoked and dried, or fermented in underground caches—was an essential step in having enough food for people throughout the winter months. Because various species of salmon run at different times, this meant months of hard work throughout the summer, catching and processing salmon. Other fish besides salmon run earlier in the spring and later in the fall, extending the long season for obtaining fish. The technologies may have continued to change over the generations, but contemporary Dena'ina are still very tied to the seasonal run of salmon.

The Dena'ina occupied the areas wrapped around the region of Cook Inlet, but differences in pronunciation and vocabulary developed into various dialects correlated with particular regions (Figure 2, Kari 1975; Kari and Kari 1982:11-12). According to James Kari, "...the language area has three major streams in the Kuskokwim drainage, as well as the upper Mulchatna River, Lake Clark and the northern half of Iliamna Lake," incorporating an area of about 41,000 square miles (Kari and Fall 2003:10). Upper Inlet Dena'ina stretches as far north as Denali (called *Dghelay Ka'a* in Dena'ina), and the Outer Inlet dialect spans across the Inlet to include the west side and the east side, stretching across most of the Kenai Peninsula. The Dena'ina spoken in the region of Pedro Bay and Old Iliamna comprises a fourth dialect (Kari and Kari 1982; Russell Kari 1987; Kari and Fall 2003:10).

Dena'ina social organization revolved around kin ties and interactions between various women, men and children depended on how people were related to one another. While it is difficult to know exactly how Dena'ina social life was organized in pre-contact times, Dena'ina were, for the most part, organized into matrilineal clans (Townsend 1981; 1965; Osgood 1937). This means that a line of descent was traced through the mother and her relatives. The clans were further categorized into groups called moieties, which served important functions in terms of how the clans of each moiety related to each other. The clan system has been deeply altered by Dena'ina interaction with Russians and Americans from the early contact years on, but is still used today, especially for memorial potlatches.

Additionally, there were elements of social and economic rank within Dena'ina communities. This meant that there were leaders who helped to orchestrate community efforts in gathering, hunting, securing shelter, and other work. This leader was called a *qeshqa*, or rich man (Fall 1981; 1987), who was the center of the group's redistribution system: "Goods flowed from the rich man's group to him and he redistributed these according to need" (Townsend 1981:631). Beyond

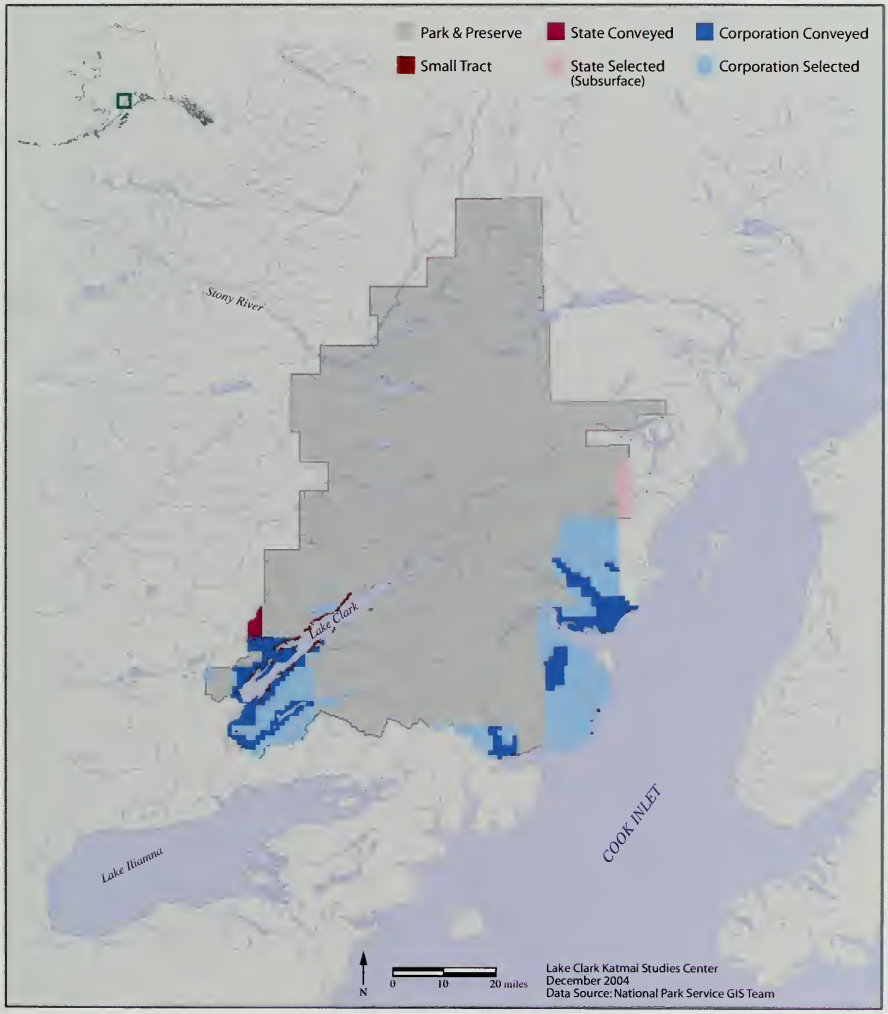


Figure 1. Map of land status in Lake Clark National Park and Preserve. At the time of printing, the Master Title Plat had not been adjusted to show the removal of the block of Corporation selected land on the coast south of Tuxedni Bay to Chinitna Bay.

these roles, the *qeshqa* took responsibility for the general welfare of the community, organized trade, and provided protection. Shamans were also important figures in Dena'ina society, and were often rich men themselves (Townsend 1981:632).

Important events such as death, marriages, and births were marked with a potlatch, and were hosted by the *qeshqa*. Potlatch was characterized by elaborate giftgiving, the extent of which elevated the prestige of the rich man and his family and clan. Particular furs and dentalium shell belts were worn as statements of that prestige (Townsend 1981:632). This emphasis on wealth and prestige and its affirmation through potlatch, as well as the matrilineal kinship system, were key elements of northwest Athabascan cultures in general (Fall 1987:9). While these systems of leadership, clans, and community cohesion were altered significantly through cultural contact, the essential values associated with them are still apparent in contemporary Dena'ina communities. People still look to astute, wise and articulate leaders—particularly elders—for advice and guidance in virtually all matters of importance. While clan organization is less strict, many Dena'ina still remember the clan organization and affiliation of their parents or grandparents.

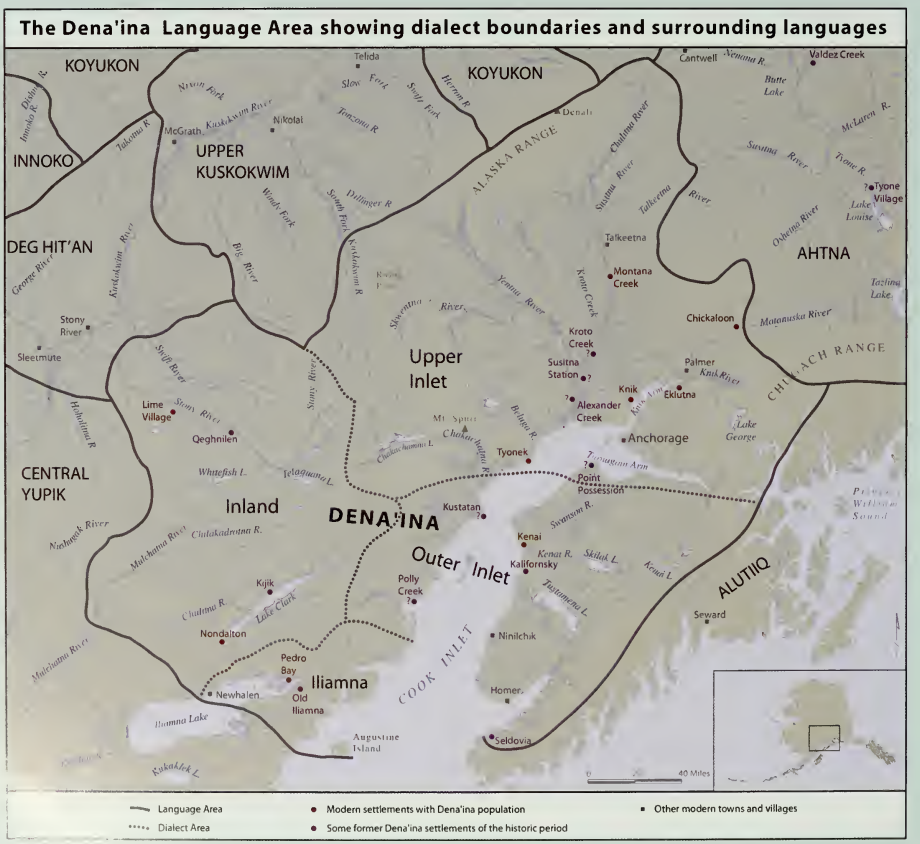


Figure 4. Map of languages and dialects in the Lake Clark area. Compiled by James Kari.

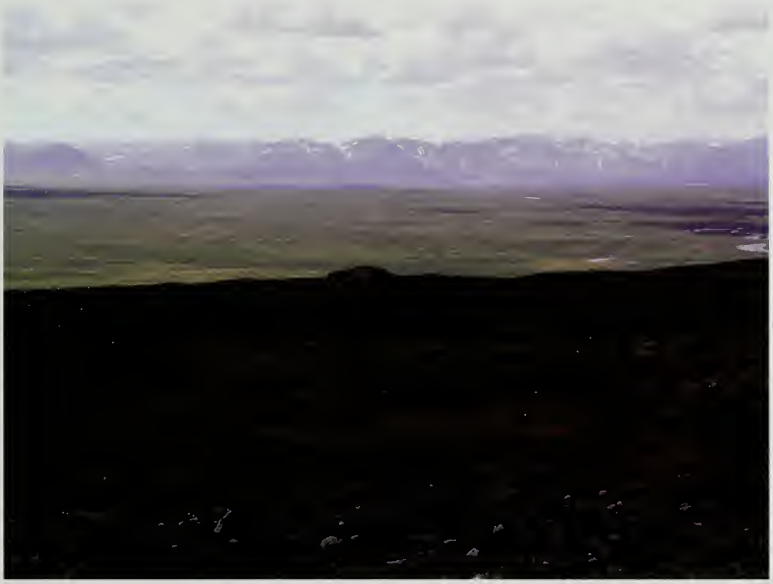


Photo 1. Votive Rock, called Qalnigi Aqenlchixi *in Dena'ina, is an important cultural feature on the vast Telaquana Plateau. Dena'ina travelers would camp and rest here in their travels along the Telaquana Trail. NPS photo.*

Dena'ina of the inland region were organized into interrelated bands: "one on the Stony River at *Qeghnilen* village, one at *Dilah Vena* (Telaquana Lake), one or more along *Vatts'atnaq'* (the Mulchatna River) or *Vandaztunhtnu* (the upper Mulchatna River), and one at *Qizhjeh* (Kijik) at Lake Clark" (Kari and Russell Kari 1982:16; see also Ellanna and Balluta 1992:58). These bands served as organizing structures for resource acquisition and distribution. Organized hunting, sharing and redistribution were facilitated by bands (see Chapter 6). Lands that may now seem vast and wild, were well traveled and well known. People had intimate knowledge of snow conditions and travel possibilities, and had a fine sense of where animal and plant resources could be found. In this sense, these lands were socially interpreted and used. Events such as illness, changes in the environment, and resource availability meant that these groups moved and re-established themselves elsewhere. Through a unique relationship with the plants and animals that sustained them, Dena'ina people continually harvested resources from their environment, and conveyed their rich knowledge of all aspects of that continual quest to their children.

Dena'ina traded with many tribes of the surrounding region including the Tanana, Tlingit, Ahtna and Deg Hit'an (formerly Ingalik) Indians, as well as peoples of Kodiak and Prince William Sound. While those living in coastal communities such as Kustatan and Tyonek had access to ocean resources, inland Dena'ina traded furs and hides for copper, porcupine quills, and obsidian to be used for blades and points (Unrau 1994:9).

The Dena'ina followed the rhythms of the seasons, and the availability of fish, game and plant resources to craft lives that were rich in seasonal variety; their ties to the land were resonant with spiritual significance. A system of animistic beliefs helped to account for a world that was alive and full of power. Mountains, trees, glaciers, animals and plants had

spirits, and the capacity to act in benevolent or malicious ways. People could interact with these entities in ways that were respectful and agreeable, or in ways that might antagonize them. This was a way to manage resources and protect the environment. People who became shamans or healers could help to negotiate relationships with the surrounding spirit world (Boraas and Peter 1996).

Like most indigenous cultures throughout the world, Dena'ina passed on their cultural practices, stories and songs orally. Children were taught life's lessons through stories, or *sukdu*, and this practice continues today. Some stories are silly and funny, some more subtle, violent and allegorical. Stories and songs were shared when various communities visited one another through the winter months, came together for trade, or grieved or celebrated together at potlatches. Social cohesion was woven through singing, dancing, gambling and other games, all wrapped around the celebrations of life and death (for example, see a series of songs recorded by Antone Evan in March 1980 (Antone Evan 1980). Fortunately, there are a number of recorded *sukdu* from which we can learn some of the lessons of a Dena'ina worldview (see for example Kalifornsky 1991; Tennenbaum 1976; Kari 1980).

Anthropologist Julie Cruikshank wrote about the value and distinctiveness of oral traditions in comparison to other knowledge systems. To her, stories are not simple accounts of events, but represent a worldview through multiple layers of meaning (Cruikshank 1991:142). In this regard, oral traditions carry much more than can be accurately translated or transcribed. The subtleties of meaning inherent in any language, the intonation, or even the visual aspect of expression on an elder's face as she tells the story, are all lost in a printed transcript. Nevertheless, these recorded voices remain an invaluable resource. Even though the Dena'ina language is now recorded in written form and traditional Dena'ina beliefs are integrated with Russian Orthodox or other Christian beliefs, there are strong strands of continuity that are still linked to the musical, oral and spiritual world of the Dena'ina past.

Dena'ina people have integrated many parts of modern society, whether in rural Alaska, urban Alaska, or elsewhere in the United States. Yet many of them, in rural as well as urban areas, continue to rely on subsistence resources. These resources are, in many cases, central to family or household diets. Subsistence activities comprise an important, albeit often invisible economy in the Lake Clark area in particular and in Alaska in general. Fish, game meat, berries, fire wood and other resources are shared in an informal exchange that is essential for many households, but which is not measured in monetary terms. Subsistence resources are supplemented by varying amounts of cash income and involvement in the market economy, to contribute to what some scholars have called a mixed economy (Wolfe and Walker 1987). The term "mixed economy" includes all of those things that people engage in throughout a year to get by: fishing, hunting and gathering and processing these foods for the winter; gathering wood and other materials; receiving subsistence resources from family and friends, and sharing with them; commercial fishing; constructing crafts for sale in the tourism industry; work in the tourism industry through lodges, guiding, or transportation; seasonal, part-time or year round employment of any number of family members in urban or rural areas; and the income from village or regional corporation dividends as well as the Alaska Permanent Fund Dividend, among other things. Almost all families in the region participate in a combination of activities like these. However, it is subsistence activities, combined with a sense of place, that tie Dena'ina people to their heritage and through which many of them still derive Dena'ina identity. When we asked Gladys Evanoff, an elder from Nondalton, about her sense of identity, or what it means to be an Alaska Native, she responded by describing the tangibilities of a subsistence way of life: "It means [we] live off the land, subsistence. Live off the fish...berries, meat, everything that grows wild, everything." For Gladys, the sense of her culture is inherent in language and skills that are still tied to the land: "...[Y]ou do the sewing and you do the...birch bark basket making, making sleds, bows they used to make, put up fish...split fish, pick berries and prepare berries and all that" (Gladys Evanoff 2004).

[illegible] interaction with Russian traders and missionaries resulted in more of a sense of shared Dena'ina identity [illegible] ever before. Additionally, following the Russian period, the majority of them converted to Russian Orthodoxy,

blending traditional conceptions of shamanism and spirituality with Orthodox ideas. Steven Behnke notes that the people across these communities are linked by a common celebration of Russian Orthodox traditions such as Russian Christmas. Yet many communities also preserve and celebrate Native traditions such as an early spring winter carnival for gathering together, socializing, gambling, and competing in some outdoor sports (Behnke 1982:11). In Tyonek, for example, Chief Chickalusion Days are celebrated in March with games, competitions, and potlucks.

Despite their shared language and shared cultural traits, it is important not to lump all Dena'ina groups together as a singular, agreeable group. While sometimes at odds (or at war) with neighboring groups, various Dena'ina communities were not always at peace even amongst themselves. The Kustatan Bear stories recount ways that the Kustatan shamans and the *Qizhjeh* shamans battled for power, sometimes in the form of animals (Kalifornsky 1991:291-307).

ATTACHMENT TO PLACE: CULTURAL LANDSCAPES

Like most oral histories of Dena'ina over the decades, Gladys Evanoff's narrative above reflects a sense of deep connection to the landscapes upon which people move and live, and from which they draw resources. This sense of people's connectedness to their land, and the fact that their very identities are inextricably tied to the places they live, has been a topic of great anthropological interest and importance, particularly in recent years. Additionally, anthropologists recognize that most people in the world move about over a number of related landscapes, and do not necessarily stay in one village or town (see Rodman 1992; Clifford 1992, 1997; Gupta and Ferguson 1997; and Tsing 1993, for example). In this sense, conventional ideas of discrete cultures and culture areas melt and blur into indistinguishable or even useless concepts (Gupta and Ferguson 1997:34).

Anthropologist Keith Basso has worked for decades with the Western Apache, helping to record place names, and to recount history as it was told by Apache elders, rather than by outside historians.[3] Basso noted that the Apache sense of history is one that is linked with places and events in a tangible, animated way. Stories about a place, often embodied in the very name of a place, evoke times and events that remain important to contemporary Apaches. He writes, "Knowledge of places is therefore closely linked to knowledge of the self, to grasping one's position in the larger scheme of things, including one's own community, and to securing a confident sense of who one is as a person" (1996:34). As N. Scott Momaday, a Kiowa Indian, has written,

> From the time the Indian first set foot upon this continent, he centered his life in the natural world. He is deeply invested in the earth, committed to it both in his consciousness and in his instinct. The sense of place is paramount. Only in reference to the earth can he persist in his identity. (in Basso 1994:1)

This certainly applies to the Dena'ina Athabascans as well, and to most other indigenous peoples. Linguist James Kari has worked with Dena'ina elders to compile hundreds of Dena'ina place names throughout the Cook Inlet region (Kari and Fall 2003; Kari and Kari 1982), and the National Park Service has created a database to document them. The names incorporate information about physical features, direction and orientation, events that occurred in a particular place, and plant and animal resources (Russell Kari 1983).

Like the Dena'ina, many indigenous people have both a practical and utilitarian link to natural resources, and spiritual and symbolic links as well. The National Park Service acknowledges the variety of ways cultural groups may draw from and shape the landscapes in which they live. Culturally altered landscapes may take the form of constructed roads, organically formed trails that connect people to resources, structures such as homes, airport hangars or stores, and even the kinds of vegetation people may cultivate (NPS 1998). Beyond physical evidence of a human presence on

[3] The Apache are an Athabascan speaking people. Dena'ina also embed historical events, stories and place-meanings in their place names system.

the land is the less tangible significance of human use as well. In the case of the Dena'ina, this means the cultural knowledge that informs centuries of hunting, fishing and gathering on the lands in the Lake Clark region. Recognizing cultural landscapes means not only seeking to identify but to understand past and present cultural links to those lands. Thus, landscapes are to be understood as cultural resources (NPS 1998, Ch 7:1). Additionally, cultural resource managers recognize that human use of particular landscapes changes over time, and those layers of use, understanding and significance may be present over any particular area (Horton 2004). The National Park Service seeks to identify landscapes—including structures, roads, trails and other features—that are of cultural significance.

Four categories of Cultural Landscapes are identified in National Park Service policy. Historic designed landscapes are deliberate artistic creations reflecting recognized styles. Historic vernacular landscapes more generally illustrate patterns of use and settlement and people's values and attitudes toward the land. Historic sites are associated with particular important events, activities, and persons. Ethnographic landscapes are associated with contemporary groups and are typically used or valued in traditional ways (NPS 1998, Ch. 7:1-2). Historic vernacular landscapes and ethnographic landscapes are the categories that seem most appropriate to describe areas of cultural occupation and use in the Lake Clark area.

Given these ways of recognizing and honoring traditional and contemporary uses and understandings of particular areas, it may be most useful to think about the cultural history of this area as layers of cultural significance inscribed on the land. Pre-contact Dena'ina cultural landscapes were unique to earlier time periods, yet many of the sites and use areas are still meaningful to Dena'ina today. As Russians and Euroamericans moved into these areas and integrated culturally with Dena'ina, new settlement areas were developed, new technologies deployed for hunting and fishing, new religions introduced, and new meanings associated with the landscapes emerged. Prospecting sites, churches, canneries and commercial fisheries all mark additional layers of cultural use and meaning on the landscape. As Dena'ina sought jobs in urban areas, or moved to other locations, their links to the land have both shifted and stayed firm. Urban areas provide new sites of meaning, and new reference points from which to appreciate rural roots. Many Dena'ina now live or stay for long periods of time in Anchorage, Kenai or other urban areas, returning to traditional family fish camps or hunting camps during relevant seasons. In this way, they may enjoy the best of several worlds, preserving long-term links to and appreciation of the land which hinges around subsistence activities.

LIVES BASED IN SUBSISTENCE

The Dena'ina communities that are located on lands just outside of the Lake Clark National Park and Preserve boundary continue to hunt and fish and travel through what are now Park and Preserve lands. Dena'ina place names for mountains, rivers, rock formations and many other details on the landscape give testimony to the fact that people have had a long and intimate history of associations to the area. Maps of the Lake Clark area before it was designated a park show extensive trails and travel routes, seasonal cabins and camps, and permanent homes (Behnke 1978; see also NPS 2003).

Subsistence hunting, fishing and gathering—activities that have been carried out over many centuries—are allowed in Lake Clark National Park, and sport hunting is allowed in the adjoining Preserve. This means that both sport and subsistence hunting and fishing, activities that were part of the Lake Clark region long before it was established as a park, could continue, albeit in newly regulated form.

The unfolding of events statewide that led to the institution of subsistence regulations is a long and complex one. The struggle over Alaska's resources and land reaches back at least two hundred years. A significant beginning point could be said to be the incursion of Russian trappers and fur traders following Vitus Bering's crossing from Russia in 1741.

The intensive hunting of fur-bearing animals that followed cut straight to the heart of subsistence practices of Alutiiq and Aleut peoples on the Alaskan peninsula, and effects were soon felt in the interior areas among Dena'ina and other Native groups as well. By the late nineteenth century, gold was found and a smaller version of California's gold rush took place in a few areas (Haycox and Mangusso 1996; Chance n.d.). Around the same time, commercial fishing began as an industry that picked up where the depleted fur trade left off. Railroads, roads and other infrastructure were developed to support these various extractive efforts over the decades (a more detailed overview of this history and changes experienced by the Dena'ina is sketched out in Chapter 4).

Native Alaskans participated to varying degrees in these extractive endeavors. Both resisting and participating in shifting economic booms and busts, they were often left with fewer resources, a reliance on a cash economy, and a highly fluctuating job market (Boraas in Kalifornsky 1991:473; Fall 1987; Haycox and Mangusso 1996).

When Russia decided to sell rights to Alaska to the United States in 1867, there was no provision for control, ownership, or rights to Native lands. One hundred years later, as Alaska achieved statehood in 1959, these issues came to a head. With exploration for and discovery of oil in Prudhoe Bay, voices of Native groups began to be heard in discussions of

Photo 2. Head of Iliamna Bay. The route from Iliamna Bay on the Cook Inlet coast along the portage into Iliamna Lake was an important route for trade and travel, first among Dena'ina and Yu'piit of the area, and then by Russian and American trappers, traders, and explorers. NPS photo H639.

land claims. Laying an oil pipeline meant settling land claim designations, and the urgency of this situation drove the development of legislation (Case and Voluck 2002; Mitchell 2001; Chance 1990:141-166).

After years of debate and discussion, the Alaska Native Claims Settlement Act (ANCSA) was passed in 1971 to provide for land claims for Alaska Native residents and for the state and federal government. Almost a decade later, in 1980, ANILCA (Alaska National Interest Lands Conservation Act) was passed to provide for the selection of federal lands in the form of parks and preserves, wildlife refuges and monuments. Lake Clark National Park and Preserve was established in December, 1980, by section 201 (7)(a) of ANILCA.[4] The park (2.6 million acres) and preserve (1.4 million acres) area, consist of over four million acres (4,030,024 as of 2001), and of these, close to two and a half million acres are designated wilderness.

> The designation of wilderness of the mountainous core area and some of the key lowland areas ensures that there will be a balance between higher density recreation on the fringes of the area and high quality wilderness public use in the heart of the park and preserve (Committee on Energy and Natural Resources 1979).

Importantly, ANILCA also provided for the continued subsistence use in many of those areas. These major pieces of legislation were complex, and the outcomes are far from homogenous or clear.

While there had been some regulations on hunting and fishing prior to the passing of ANILCA, with its passing, subsistence practices fell under a new system of management. Modern subsistence practices are different from traditional subsistence methods in terms of travel and harvesting technologies, and amounts of time necessary to procure necessary fish, game, birds, and berries. In contemporary times, however, these subsistence practices are conducted within carefully delineated regions, and with enforced limits in terms of animal counts, and in particular windows of time.

Under the Federal Subsistence program, and with technical advice from the Office of Subsistence Management of the U.S. Fish and Wildlife Service, Regional Advisory Councils (RACs) vote to support or not to support proposed adjustments to existing regulations. The Federal Subsistence Board can only act against a Regional Advisory Council's recommendation if the RAC's decision is counter to conservation principles, denies harvesting opportunities to qualified subsistence users, or is arbitrary and capricious. At the state level, local advisory committees provide input for the Board of Fish and Board of Game. In addition, the Subsistence Resources Committee of the National Park Service ensures that subsistence management by these state and federal agencies in national parks is consistent with NPS policy. Subsistence hunting and fishing take place in the midst of commercial and sport hunting and fishing. Subsistence harvests make up only about two percent of the overall Alaska harvest (Wolfe 2000:2).

Thus, the natural resources may be the same, but the complexity of the regulatory process—as well as significant changes in technology—mean that modern subsistence is quite different from subsistence practices of even fifty or a hundred years ago, and quite far from what it was in pre-contact times.

To park visitors—and probably also to many National Park Service employees—the complexity of the legislative process surrounding the establishment of Alaska's parks or of subsistence practices is largely invisible. While to some visitors it may be common knowledge that Alaska Natives live near and hunt and fish within parks, others seek out Alaska's parks largely for an experience of wilderness, away from people, and in isolation in a wild landscape (NPS 2003). Tourist brochures and guidebooks promise the visitor to Lake Clark National Park and Preserve experiences of wilderness, remoteness, solitude, and isolation.

94 Stat. 2383; Public Law 96-487.

The case of subsistence management (which to some may seem a paradoxical phrase), is one among many challenges that face subsistence specialists, and other National Park Service employees in Alaska's parks. Today's subsistence policies—even as they still evolve—are the result of a great deal of change that Alaskan Natives have seen over past decades. That change has included cultural clash and integration, radical restructuring of local economies, discontinued language use, altered world views and more. Simultaneous to these changes have been shifts in land designations and changes in ideas about how best to manage public lands such as National Parks. Far from being a static given, park policy and ideas for management have been constantly changing as well (Norris 2002).

PARKS, NATURE AND CULTURE: CULTURAL RESOURCE MANAGEMENT CHALLENGES

As suggested above, the lifeways, worldviews and knowledge systems of the Dena'ina who have lived for centuries on this landscape offer layers of meaning about the land. The establishment of a National Park and Preserve is another, more recent, layer of meaning laid across this landscape. The national park idea, particularly as it refers to large nature parks found in the western part of the United States, rests on particular ideas about humans and nature. One key assumption is that nature is something fundamentally different and separate from human culture. Another is that nature started out pure, devoid of human influences, and should be protected and returned to its pristine state. Nature is understood as a sanctuary for us to enter into as a refuge from hectic urban life. Bruce Braun described nature's externality in American thought, "It is a place to which one goes—the site of 'resources,' a stage for 'recreation,' a source for 'spiritual renewal,' and a scene for 'aesthetic reflection' " (Braun 2002:ix). Because it is thought about in a number of ways and serves a variety of purposes for those who visit it, Braun suggested that nature is always inherently social, and calls it social nature (2002:10; see also Cronon 1995). This social nature includes ideas in the popular imagination about park areas—forests, mountains, and other phenomena—as wild places, absent of people.

The National Park Service makes many efforts to acknowledge and highlight ways that parks are indeed cultural places. Alaska's parks are part of the National Park Service system, and comply with the same national management policies. NPS policies outline the many ways we can identify and protect objects, places, languages, and many other culturally significant resources. In addition to Cultural Landscapes, discussed briefly above, the Cultural Resource Management Guidelines identify four other cultural resource types: archeological resources, structures, museum objects and ethnographic resources (NPS 1998, Ch. 1:3). While all of these categories have relevance to ethnography, cultural landscapes and ethnographic resources are perhaps most centrally significant to contemporary populations.

> Ethnographic resources are basic expressions of human culture and the basis for continuity of cultural systems. A cultural system encompasses both the tangible and the intangible. It includes traditional arts and Native languages, religious beliefs and subsistence activities. Some of these traditions are supported by ethnographic resources: special places in the natural world, structures with historic associations, and natural materials.... Management of ethnographic resources acknowledges that culturally diverse groups have their own ways of viewing the world and a right to maintain their traditions. (NPS 1998, Ch. 1:3-4)

Ethnographic resources are identified and assessed based on people's sense of connection to them, and the level of significance the places, objects, species or meaning systems may have for Native peoples. Still, the word "management" in Cultural Resource Management may seem an awkward one when people's lifeways, worldviews, languages, and meaning systems are at stake. Living communities, their associations with park areas, and their contemporary struggles and celebrations are very different from objects and structures of the past. At best, we aim to work with contemporary associated groups to identify those cultural elements—whether tangible or intangible—that tie them to particular places. We work to protect such resources, where possible, and to educate the visiting public about them.

Some of the challenge of cultural resource management lies at the root of the founding of the National Park Service in the United States. Early ideas of National Parks as vast, unpeopled wilderness areas are at odds with the reality that people have lived, for millennia, in what are now designated as park areas. For early European settlers, the predominant imagery and language was of conquering and beating back wild nature; Native peoples only added to the sense of danger (Nash 2001; Oelschlaeger 1991; Callicott and Nelson 1998). William Cronon noted that the word "wilderness" did not, until very recently, convey a sense of a desirable and enjoyable place to inhabit. "To be a wilderness then was to be 'deserted,' 'savage,' 'desolate,' 'barren'—in short, a 'waste,' the word's nearest synonym" (Cronon 1995:70). For early European colonists, there was too much wilderness to appreciate. Wilderness as a site for recreation was the last thing on their minds. By the mid-20th century, however, this had changed. "Wilderness" became a category of something to be desired rather than feared. And, as land across the country underwent various forms of development, the idea of protecting large selections of lands emerged.

In addition to the establishment of the National Park Service—and perhaps because the amenities in and surrounding parks became much more "civilized" than some would like—the wilderness idea was pursued, and eventually resulted in its own legislation. In 1964 the Wilderness Act was passed.

> A wilderness [is]... undeveloped Federal land retaining its primeval character and influence... which is protected and managed so as to preserve its natural conditions... affected primarily by the forces of nature, with impact of man's work substantially unnoticeable... [and] has outstanding opportunities for solitude or a primitive and unconfined type of recreation.... (Wilderness Act 1964)

Large portions of public lands that were held by the Forest Service, the National Park Service, and the Bureau of Land Management were designated as wilderness. In these designations, a second layer of the wilderness ideal was laid over parts of some national park areas.

> Wilderness has taken on connotations, and mythology, that specifically reflect latter-twentieth century values of a distinctive Anglo-American bent. It now functions to provide solitude and counterpoint to technological society in a landscape that is managed to reveal as few traces of the passage of other humans as possible....
>
> For the most part, neither managers nor visitors are aware of the ways in which the wilderness landscape has been altered by former aboriginal activities (hunting, clearing, burning, agriculture), past and present local landscape alterations (game extinctions, logging, alien introductions, riparian destruction by grazing), or system wide human impacts (habitat fragmentation, air pollution, suppression of native fire regimes, climate change). (Graber 1995:124-125)

Almost two and a half million acres (2,470,000) of Lake Clark National Park and Preserve's four million acres are designated as wilderness.

> Lake Clark National Park and Preserve was set aside to maintain its wilderness qualities. ... A visit to Lake Clark is an experience that will afford you a rare opportunity in today's world, the opportunity to experience to solitude and grandeur in the same moment. (http://www.nps.gov/lacl/park_history_2000.htm)

Wilderness designation means that a either a Wilderness Management Plan or a Backcountry Plan is outlined to help direct visitor use in as non-intrusive a way as possible. Lake Clark National Park and Preserve does not currently have a Wilderness Management Plan in place.

A number of environmental historians and other social scientists have seriously criticized the wilderness idea, and it is not surprising that these debates also play out among NPS managers (see Callicott and Nelson 1998). Critics have

suggested that ideas about wilderness as vast, empty stretches of unoccupied lands elide a history of Native occupation on basically all North American lands. As William Cronon put it, "The removal of Indians to create an 'uninhabited wilderness'—uninhabited as never before in the human history of the place—reminds us just how invented, just how constructed, the American Wilderness really is" (1995:79). He added that wilderness is "a product of the very history it seeks to deny. Indeed, one of the most striking proofs of the cultural invention of wilderness is its thoroughgoing erasure of the history from which it sprang. In virtually all of its manifestations, wilderness represents a flight from history" (Cronon 1995:79). To Cronon, the central paradox of the concept of wilderness is that it completely separates what is human from what is natural (1995:79-80). Wilderness becomes the antithesis of culture and civilization.

Wilderness managers, on the other hand, make compelling arguments for the minimizing of human impact on wilderness lands, and the preservation of qualities of wildness that so many people value and enjoy. Discussions have gone on for years about how best to integrate management for both wilderness qualities and cultural resources. Questions about whether material evidence of cultural occupation should be allowed to remain in wilderness areas, for example, are tricky, especially because some material evidence (such as debris from hunting camps) is less appealing than others (such as the beautifully handcrafted cabin of Dick Proenneke) (Medred 2003:G-1, G-4). A National Wilderness Steering Committee of the National Park Service has worked to bridge this divide (NPS 2002).

The year 2004 marked the 40th anniversary of the passing of the Wilderness Act. For parks such as Lake Clark National Park and Preserve, which also have a wilderness designation, recognizing and providing for appropriate research, planning and stewardship of ethnographic resources, as mandated in park policy, is combined with policies and practices aimed at protecting wilderness. Helping to make people's past as well as their contemporary lives more visible is an important aspect of this work.

TRADITIONAL VS. MODERN

The designation and management of lands they lived on as "wilderness" provided new meanings and experiences to the Dena'ina around Lake Clark National Park and Preserve. Another set of new ideas and vocabularies organized their activities into "traditional" and "modern." These categories are worth considering in regard to the Dena'ina. The term "traditional" is commonly used to refer to the cultural practices, belief systems, technologies and knowledge that people held in the past. The National Park Service aims to gather traditional knowledge from elders through oral histories, and it focuses on ways that Traditional Ecological Knowledge (TEK), or that which is gained experientially and often passed on orally, can complement other park research in natural and cultural resources.

Often, the use of the term "traditional" refers to a time before contact with Russians and Euroamericans who moved into the area in the late 18th and early 19th centuries. This makes some sense, as a great deal of cultural change occurred following the contact period. However, the division between pre- and post-contact, or between traditional and modern, can be somewhat problematic. Sometimes there is an implied assumption that before contact, before a radical rupturing of cultural practices, there was a long period of life without much change. "Traditional" life is often understood as "how things were done" and one associated implication is that things were done in set, unchanging ways. As anthropologists and historians have noted, this implies that "traditional" people lack history (Wolf 1997). "Traditional" time is often understood as static and unchanging or slow to change.

Contact, in virtually every case, brings rapid change to indigenous populations. Access to different forms of technologies—particularly transportation and weapons technologies—often means that incoming groups are able to force change upon indigenous populations. Typically, post-contact change is thus often quite marked in contrast to pre-contact times. The rate and intensity of change that comes with contact is typically of a very different scale than what native peoples may have been used to. And indeed change was forced upon people in many ways—whether

through forced English language in schools, or introduction of a wage economy—on the level of individual actions and governmental policy.

The history of Dena'ina in Southcentral Alaska is inextricably enmeshed in the history of Russian fur traders and clergy; American entrepreneurs and extractors of fish, animals and minerals; American missionaries and educators, and many others. Because of these endeavors and interactions, even the category "Dena'ina" has been applied more broadly. Non-Native traders, prospectors, cannery owners and others frequently married Native women, had children, and became integrated into Dena'ina communities.[5] Their children are also Dena'ina. Dena'ina people adopted boots, clothing, rifles, tobacco and foods such as flour, rice, tea and sugar that were introduced in these interchanges.

Debates about what it means to be a "traditional" Dena'ina could have many variations. Are rifles, used for subsistence hunting, modern or traditional? Are snowmobiles, while perhaps clearly "modern," considered part of a traditional subsistence way of life? Could Tyonek youth in their twenties, who love to watch videos and eat burgers and ice cream that are flown in on airplanes, be considered traditional? What about young Dena'ina adults attending college at Yale or the University of Chicago? What if all of these same people also stay in fish camps and learn to put up fish, or hunt in the fall and winter, sharing their harvest with their greater communities? Asking whether particular practices should be designated as "traditional" may not be the most relevant exercise. If we ask instead, "Do these people identify as Dena'ina?" the answer would be "Yes." As Shauna Sagmoen of Lime Village says about Dena'ina identity, "[I]t means different things for different people" (Sagmoen 2004). Dena'ina identity, as is explored in the chapters that follow, takes many forms. And for our purposes here, strands of continuity in the midst of waves of change can be identified. What it means to be Dena'ina today is perhaps more deliberate and more self-conscious than at any other time in the past. This includes language acquisition and the learning of particular skills.

Thus, rather than conceptualizing pre-and post-contact periods, or a traditional and modern split, it may be more useful to consider a continuum of cultural practices, and an ongoing flow of changes generated from within and outside of Dena'ina communities. Among these changes, we can trace strands of continuity in lifestyle and worldview that have defined and continue to define Dena'ina identity. Through oral histories and contemporary interviews, we can see that some of these continuities have to do with a deep connection to the land, respect for elders and for one another, and a dependence on and fierce protection of subsistence practices.

When we acknowledge both continuity and change, we also see that there is a great deal of variation in cultural practices over time and across the region, from village to village, and even from household to household. To say that Dena'ina all share something in common is true in the sense that all share a cultural and linguistic heritage, despite how or whether each individual carries on such practices today. Yet each family and even individual persons will make choices unique to them.

These choices are influenced by constant exposure to urban areas and economies. All indigenous people in the world today are influenced by economic and cultural connections that are global in scope.

> As they enter the 21st century the indigenous peoples of the circumpolar north will continue to rely on natural resources for their economic and cultural survival, but they are increasingly tied to global networks of production and exchange and subject to the consequences of globalization and modernity. Technology, industrial development, environmental problems, social change, immigration and tourism all pose threats to traditional lands, livelihoods and cultures. In response indigenous groups have fought for and, in some cases, have achieved increasing political power and self-determination, as well as a degree of control over resources development and management. (Nuttall 1998:2)

[5] In [illegible] period, it was more common for male outsiders to marry Dena'ina and other Native women than it was for Euroamerican women to mar[illegible]. By the mid-1960s, this pattern had reversed.

In acknowledgement of the changing nature of Dena'ina culture, and the variability found throughout Dena'ina communities, this study aims to situate particular events in particular historical moments, rather than generalizing across time. Simplifying descriptions of cultural practices, while convenient, may not do justice to the complexity of those practices, and the ways they change over time. The frequent use of excerpts from oral histories can help the voices of particular Dena'ina individuals speak for themselves, and convey something of the life and experiences they share with others. Dena'ina individuals convey the details of lifeways from the past with subtlety and richness, offering glimpses to the uniqueness of their lifeways, and suggesting the many ethnographic resources we might observe and honor.

PEOPLE AND THEIR ENVIRONMENT

Anthropologists have struggled for more than a century to address the study of people and their surrounding environments. At first, this may seem like a transparent situation: people live in, adapt to, and alter various environments, and anthropologists should investigate the variation in these practices that may be found around the world. Upon a closer look, however, a number of assumptions are linked to even the simple pairing of "people" and "environment." Such a juxtaposition implies that people are separate from their environments, and perhaps also that human organisms are separate from other organisms. Human culture is often thought to be the significant feature that separates us from other species. When culture is understood as dichotomous to nature, the dichotomy itself is a product of cultural thinking.

Anthropologist Tim Ingold has suggested that scientists should understand people as learning, creative, adapting organisms—as a part of that world, rather than separate from it: "...[I]f every organism is not so much a discrete entity as a node in a field of relationships, then we have to think in a new way not only about the interdependence of organisms and their environments but also about their evolution" (Ingold 2000:4). In the study of hunter-gatherer societies, for instance, analyses of people's technical hunting and gathering skills are usually separated out from the imaginative, religious or ceremonial dimensions of people's lives. These sorts of studies preserve divisions that reflect more of about the researcher's taxonomies of thought than those of the study community. Knowing something about the traditional Dena'ina cosmology and understandings of the spirits around them opens up an entirely different way of comprehending the world.

Consider the story and song about a rock in the Lower Newhalen River as told by Gabriel Trefon, a Dena'ina Chief of Nondalton, recorded in 1961. In Gabriel Trefon's recounting, the narrative is in the first person. We hear the song from the point of view of the rock:

> The current wraps around me and then the water shapes me. ...I have been shaped by water and then fish swim past me. They (animals) have used me. My children (little rocks) drift ashore downstream from me. I am inaccessible. The sun passes all around me. They depend on me. They use me for playing. (Gabriel Trefon 1985; Ellanna 1986:A-9, Ti1a)

Ingold started from the premise that "ways of acting in the environment are also ways of perceiving it" (Ingold 2000:9). Thus, work, play, and travel through particular surroundings may all be interrelated, and all inform aesthetic appreciation of the environment. Like the Dena'ina, many indigenous groups understand various elements of the environment—mountains, glaciers, trees—to have their own spirits. Ingold suggested the term "sentient ecology" to refer to such living, dynamic and interactive environments (Ingold 2000:10ff). All such activities inform a sense of place, and inform the naming and remembering of particular places as well (Basso 1996). Such culturally significant

landscapes are ethnographic resources worth recognizing, understanding and respecting. The work of Ingold, Basso, and other anthropologists provide tools and frameworks for understanding Dena'ina perceptions of their world.

What Dena'ina people deeply value and enjoy about their homelands—the routes they travel by foot, dog team or snow machine; the hunting, trapping and fishing areas to which they relocate for harvest seasons; and their fondness for being out in these seasonal camps—is not necessarily so different from the openness and quiet, the smells and sounds, that a backpacker or river runner seeks. For the Dena'ina, this has long meant broad inhabitation of the land. People may have homes in village settlements, but for a large part of the year, they travel and live on the land. Many Dena'ina people say that getting out to the camps is their favorite time of the year, what they yearn for at other times. And this movement across and living upon the landscape is shaped by long-term associations with the area. Stories are passed down, place names encode past events, and the landscape is alive with history and significance with direct relevance to their long-term occupation of the area. Dena'ina may not be in search of the same sense of "solitude" as some park visitors from other areas, and they may not feel that the lands they traverse and know are "remote." But visitors and users from varied backgrounds may share an appreciation for the spectacular mountainous terrain of the region, the clear rivers and lakes, and the beauty and abundance of wildlife. The range of appreciation that various users may have are no doubt overlapping rather than mutually exclusive.

METHODS AND SOURCES

Lake Clark National Park and Preserve, and the communities that live around and within its borders, are geographically fairly distant from urban life, and not easily accessible. One might guess that research materials for such an area would be scarce and thin. In fact, a wealth of information on the Lake Clark area can be culled from early ethnographic and archeological studies, first-hand written accounts of indigenous residents of the area, the notes and letters of Russian Orthodox priests, commercial fishing records, church records, census data and, most importantly, from a large wealth of oral narratives—in Dena'ina and in English—that have been recorded over the decades. Often taken from a community's most elderly residents, the memories recorded in the narratives often reach back several generations; stories, or parts of them, may well reach back hundreds of years.

Recent archeological research in Lake Clark National Park and Preserve, for example, builds on past research, and continues to fill in a picture of life lived across these lands many generations ago (Tennessen 2006). This Ethnohistory synthesizes materials presented by anthropologists, historians, archeologists and others, in order to sketch a broad, yet detailed picture of the Lake Clark region. In the process of such a synthesis, is important to recognize that not every source can be treated on equal terms. Some consideration of the context in which information was recorded must be taken into account. Archeological or ethnological methods fifty or seventy years ago are different from methods in those fields today.

For example, Cornelius Osgood's *Ethnography of the Tanaina* is based on his work with Athabascans throughout the Cook Inlet region in the 1930s. His text is very detailed and, like other early twentieth century ethnographies, includes dozens of photographs and illustrations documenting various technologies and "traits" of the Tanaina (Dena'ina). Osgood's work has served as a key foundation for others who work in related areas.

Yet, Osgood described his own "insecurity of mind" in undertaking his rather ambitious task of working broadly across Dena'ina territory. He noted that he spent about a month in the Kachemak Bay settlement of Seldovia, working with people there, before moving on to spend one or two weeks in each of the villages of Iliamna, Eklutna, Tyonek, Susitna and Kenai (Osgood 1937:5). After a winter of reviewing his materials, Osgood made another trip of several weeks to Kenai and Seldovia. Osgood did not return to the Iliamna area the second year, and he did not visit Nondalton, Lime Village, or Stony River at all.

In addition to severe limits on time in the field, Osgood honestly acknowledged the limits to finding and working effectively with Native informants. "To reach an isolated group of Indians after such an expenditure [of time and money], often physically worn, only to discover that no information can be obtained for want of a common language, is extremely discouraging," he said. Even those informants who did know some English usually had "knowledge of a hundred or so 'store' nouns together with a few verbs and minor parts of speech extended in usage to take on almost any meaning" (Osgood 1937:21).

> Consequently, it should not be surprising that the notes which make up this monograph were gathered through a medium of communication which most often combined Pidgin English and Athapaskan stems amplified by drawings, charts, and demonstrations of many kinds. The recording of data varied from stenographic transcription to brief notations scribbled in pouring rain. (Osgood 1937:21)

Add to this the idiosyncrasies of personality what Osgood considered to be the ignorance of youth about the ways of their ancestors, different levels of motivation, and reportedly fairly heavy influence of alcohol in some of his informants, and one must wonder how Osgood gathered the level of detailed information that he evidently did.

The point is not to dismiss the information found in Osgood's ethnography of the Dena'ina, but to consider it within the limits and context in which it was gathered and recorded. Osgood's full and minutely detailed narrative, then, stands as a token of his dedication to his project. Undoubtedly, his experience with other Athabascan ethnography provided some context. Yet it is still remarkable that *Ethnography of the Tanaina* emerges from the sketchy conditions under which information was gathered. However, Osgood's work is held up as a handbook for anyone conducting ethnographic work in the region, and it is cited respectfully in most of the ethnographic research conducted in its wake. In key texts such as Priscilla Russell Kari's *Tanaina Plantlore: Dena'ina K'et'una* (1995), heavy reliance on Osgood is evident throughout—although Russell's work is also based very solidly on ten years worth of field research with Dena'ina people throughout the region.

Similarly, every source used in the present study reflects its own era and its own sets of methods and theoretical assumptions, whether explicitly or not. Osgood's ethnography, the letters of Russian Orthodox priests, and oral narratives recorded thirty years ago or last season are all very different from one another. Yet, each of these sources can help to paint a broader, more detailed picture of not a singular "way of life," but of shifting and constantly transforming ways of life.

Several sources have been absolutely central for the research that contributed to this study, as will be evident in the pages that follow. *Nuvendaltin Quht'ana: The People of Nondalton* was published in 1992 after a decade of ethnographic work in the Nondalton area. Linda Ellanna and Andrew Balluta interviewed dozens of Dena'ina elders, studied maps with them, and recorded names and stories of places and travels across the Lake Clark area. Ellanna and Balluta drew heavily upon the linguistic, place-names, and resource use research of James Kari and Priscilla Russell Kari (Kari and Russell Kari, 1982). Ellanna brought sharp anthropological sensibilities to the project that serve as a wonderful legacy for those of us who follow. Andrew Balluta has made immeasurable contributions to the recording and preservation of Dena'ina culture through his work on *Nuvendaltin Quht'ana*, and through countless other efforts including recorded interviews, translations, interpretation, language workshops, culture camps and so much more. Ellanna and Balluta's study focuses on Nondalton, but includes important information about surrounding communities in the Iliamna and Lime Village areas as well. Joan Townsend's *Ethnohistory and Culture Change of the Iliamna Tanaina* (1965) stands out as the foundation of ethnographic work for the Iliamna area, and serves to link and extend the Dena'ina story of the various communities across the Iliamna Lake area. Joan Townsend also authored an entry on the "Tanaina" for the *Handbook of American Indians* (1981), which offers a fairly thorough overview of Dena'ina of the region. For the coastal area and in the Upper Cook Inlet area, James Fall has written an impressive array of detailed accounts documenting everything

from the King Salmon fishery case in Tyonek to traditional cultural places at Eklutna and near Elmendorf (Fall 1981, 1987, 1989; Fall et al. 1983, 1984; Fall et al. 2006). His *Patterns of Upper Inlet Tanaina Leadership: 1741-1918* (1981) continues to be the seminal work on rank and leadership among the Dena'ina of this region.

In the mid-1970s, Joan Tenenbaum transcribed and translated numerous *sukdu*, or traditional Dena'ina stories, as told by Dena'ina speakers such as Katherine Trefon, Antone Evan, Alexie Evan, Gulia Delkittie, and Mary Trefon (Tenenbaum 1976). These have provided important insight into the complex, often allegorical stories Dena'ina used to teach moral lessons or share information. The many works of James Kari and of Priscilla Russell Kari (now Priscilla Russell) offer some essential foundations. James Kari compiled the *Dena'ina Noun Dictionary* in 1977, which served as an important tool for language learners. More recently, he completed the *Dena'ina Topical Dictionary* (Kari 2007). James Kari's linguistic efforts have resulted in invaluable resources, lists of place names, analyses of language and culture movement and origin, and an ongoing quest to flesh out and better understand the Dena'ina of the greater Cook Inlet region. Priscilla Russell Kari's meticulous work in ethnobotany and ethnoornithology in the Lime Village area reflect her dedication and extensive knowledge of that area (Russell Kari 1977, 1983; Russell and West 2003).

The National Park Service has supported the research efforts of James Kari, Priscilla Russell Kari, Linda Ellanna, and Andrew Balluta among others. Additionally, it has sponsored other research projects that contribute to the recording of the history of Dena'ina as well as Europeans and Americans in the Lake Clark/Lake Iliamna region. Harlan Unrau compiled a very detailed Historic Resource Study for Lake Clark (1994). John Branson, historian for Lake Clark Park and Preserve, arguably knows more about the lands and people of the Lake Clark area than anyone. He has assembled photographs and finely detailed descriptions of people, places and contexts in *From the Hinterlands to Tidewater: A Grassroots Pictorial 1885-1965* (1998), and has written about and edited journals of some of the American settlers and explorers in the area (1997; 2003). A joint project between the Alaska Native Language Center's Oral History Project at the University of Fairbanks and Lake Clark National Park and Preserve resulted in numerous recorded interviews organized into a "Jukebox"—an interactive program which enables the viewer and listener to select parts of interviews, view maps and photographs, and read related text (http://uaf-db.uaf.edu/jukebox/PJWeb/proguselc.htm).

Of course, at the core of all of these are the most important sources: the voices of Dena'ina people telling their life stories, sharing their heritage, and dedicating tremendous time and effort to the preservation of their cultural history. Their words, and the published materials resulting from them, serve as building blocks for one another, all contributing to the overall Dena'ina story in the region of Lake Clark National Park and Preserve. They facilitate conversations across disciplines, across expanses of mountainous space, and across time, as each researcher sought in his or her own way to make sense of and interpret for others the changing lives of the Dena'ina people.

Even as this is being written, there are numerous initiatives among Dena'ina communities themselves to develop curricular materials to learn and teach Dena'ina language (see Chapter 7). New interviews are being conducted with Dena'ina elders, to capture as much as can be remembered of Dena'ina history and culture. Old recordings are being transcribed and digitized, and on-line databases are now available for those interested in Dena'ina language, culture and history. This proliferation of materials and the interest and dedication of those working on them means that the few early scattered sources on the Dena'ina are being supplemented and enriched with much more, even as Dena'ina culture is reclaimed and reinvented.[6]

This document is one element of a multi-faceted ethnographic project for Lake Clark National Park and Preserve. An Ethnographic Overview and Assessment of the West Cook Inlet coastal peoples was produced in a Cooperative Agreement

[6] Dena'ina language teachers, for example, are developing vocabularies to refer to contemporary items such as computers, iPods, snowmachines, and so forth which are not present in the Dena'ina recordings of their grandparents.

with the Division of Subsistence of the Alaska Department of Fish and Game (Stanek et al. 2007). Because of their longstanding relationship with the community of Tyonek in particular, researchers James Fall and Ronald Stanek were uniquely suited to work intensively with Tyonek people. Their work consisted of carefully reviewing the literature, visiting with elders in the community, looking over family photographs and other materials, and gathering stories. They focused on cultural occupation of the area over the last several generations, including hunting and fishing patterns, kinship and genealogy, movement and trade, religion, and many other cultural aspects. Stanek and Davin Holen, also of the Division of Subsistence, worked with the principal and teachers of Bartlett School in Tyonek, in an effort to involve students in the experience of gathering oral histories from their relatives. They also conducted an extensive literature review for the area, and compiled an annotated bibliography.

In addition, in conjunction with both the Ethnographic Overview and Assessment for West Cook Inlet and this broader Ethnohistory of Lake Clark National Park and Preserve, linguist James Kari has conducted a simultaneous systematic inventory of all the existing audio oral history or language recordings with Dena'ina people in English and Dena'ina. This inventory, the Dena'ina Audio Collection, has at present over four hundred recordings, and includes recordings held at the National Park Service repository and at the Bureau of Land Management, the Bureau of Indian Affairs, Cook Inlet Region, Inc., and other agencies in Anchorage, as well as at the Alaska Native Language Center at the University of Alaska Fairbanks. The inventory process intersects with an archival project at the Alaska Native Heritage Center, and various language learning initiatives (discussed in more detail in Chapter 7). In this way, the project has fostered a number of formal and informal partnerships with various agencies and organizations.

This document contains an extensive literature review of primary and secondary sources, including archeological studies, early ethnographies, records and diaries of missionaries and teachers, and more recent ethnographic and linguistic studies in the area. I coordinated with Ronald Stanek, James Fall, and Davin Holen, joining them on a number of trips to Tyonek, and sharing sources. I also spoke with members of the various communities around Lake Clark National Park and Preserve as time and travel allowed, either on site in villages, or when village residents were in Anchorage or Kenai for other reasons. Since a number of people have been gathering for Dena'ina language workshops and classes periodically, this has provided an opportunity for me to visit with people, and witness some of the language learning efforts as well as the community building that take place at such events.

Dena'ina people worked on this project in a number of capacities. Their work included coordinating village visits, reviewing drafts of the writing, and writing sections of the reports. Michelle Ravenmoon served as an intern for the project during the summer of 2004, and she assisted in conducting new interviews, transcribing older interviews, reviewing the oral histories available to us. In this report, Michelle Ravenmoon authored an essay on the influence of aviation on Dena'ina culture and provided the historical timeline on page 29.

Professor Alan Boraas of Kenai Peninsula College wrote portions of the text on Dena'ina prehistory, migration and occupation of the Lake Clark region. He has over thirty years of experience researching Dena'ina culture, history and prehistory, in close collaboration with Dena'ina people. In this way, we are striving to offer the perspectives of the knowledge and experiences of Dena'ina people, or those who are experts in particular fields related to them.

Photographs used in this document were selected from our own NPS photo collections as well as those at the University of Alaska Anchorage, and at the Anchorage Museum of History and Art. NPS staff also photograph many contemporary events to help document and illustrate recent Dena'ina initiatives and activities. Oral history and other interview recordings and transcripts are housed in the NPS collections at the Alaska Regional Office in Anchorage. Bibliographic citations for most of these materials include the name of the person interviewed, a date, an accession number, and

possibly the name of the interviewer and/or translator of the interview. This information is not necessarily uniform, and its format differs from one citation to the next.

This document is meant to serve as a resource to National Park Service managers, but also to those in the Dena'ina community. While it covers a broad range of territory and time, it is by no means comprehensive. We hope it fairly captures the spirit of Dena'ina lifeways in the Lake Clark region.

Johnny Kankanton at Nondalton Fish Camp, Nastasia Zackar's smokehouse. Circa late 1930s. NPS photo H971.

CHAPTER TWO

The Lake Clark Environment

LAKE CLARK: *QIZHJEH VENA*

To a first-time visitor, Lake Clark may seem like a remarkable secret, stunningly revealed. An air approach from Anchorage involves flying west over Cook Inlet, and following the McArthur River on up to Blockade Glacier and through Lake Clark Pass. The route follows the Tlikakila River drainage down to where it joins what the Chokotonk River has poured into Little Lake Clark, and swells into the forty mile stretch of Lake Clark proper.

The flows of these tiny rivers as the guiding route to a flight path into Lake Clark may be lost, however, in the visually demanding rise of jutting and jagged mountains as far as the eye can see. The Chigmit Mountains, part of the longer Aleutian Range, fall on the south side of Tlikakila River, and the Neacola Mountains, part of the Alaska Range, are on the north.[7] There is no question that these mountains have been formed as a result of a rough and violent clash between giant tectonic plates. The resulting peaks are so jagged and severe, it almost hurts to look at them; the ridges seem sharp enough to cut your finger. Snow fills and softens vast ragged cavities between peaks, and the aqua luminosity of glaciers glows through centuries' worth of dirt and debris.

It does not appear possible for a person to get a foothold anywhere in this environment. But in fact, people have occupied and traveled through these rough ranges for millennia. Prehistoric sites have been located near Telaquana Lake, along the Upper Mulchatna River, at Kijik on Lake Clark, and throughout the area that is now Lake Clark National Park and Preserve.

Lake Clark Pass and Merrill Pass are two of the main air travel routes through the area. Air travel, following routes through these steep mountains that were historically traversed on foot, is the main form of transportation through the area today. Airplanes support transportation of people and supplies for interior villages such as Lime Village and Nondalton.

Finishing the inbound flight, as the river drops into Lake Clark, the surrounding mountains, covered primarily with white spruce, white birch, cottonwood and alder, soften a bit. The forested landscape encompassing Lake Clark seems not only inhabitable, but eminently inviting. And one can easily imagine why people would have chosen to settle in sites along this lake for settlement over many generations.

FIRE AND ICE

The juxtaposition of sharp, harsh ridges and rolling, inviting hills is one of many contrasting extremes in this unique area. In a chaotic jumble mountains rise from sea level to elevations of over ten thousand feet. Hard rock gives way to soft tundra. In perhaps the most striking contrast, glaciers lay on the shoulders of the two imposing and potentially active volcanoes, Redoubt Volcano (10,197 ft) and Iliamna Volcano (10,016 ft), found within the park boundaries.

A string of volcanoes lies at the northern end of the long chain of the Aleutian volcanic arc. They are part of the larger "Ring of Fire" that encircles all of the coastal edges of the Pacific Ocean (see map in Simkin et al. 1994). There are more than forty historically active volcanoes in the Aleutian arc alone, and there is an average of at least one volcanic eruption a year (Brantley 1991:2).

For people who live in the surrounding mountains and around Cook Inlet, the continued potential for volcanic eruption (and seismic activity that can trigger eruption) is a constant, if not always conscious, part of every day life. In a longer term

[7] Geological sources differ on exactly how far the Aleutians extend and where the Alaska Range begins. It seems best to think of the Aleutians as a great arc, including Redoubt Volcano and possibly also Mount Spurr.

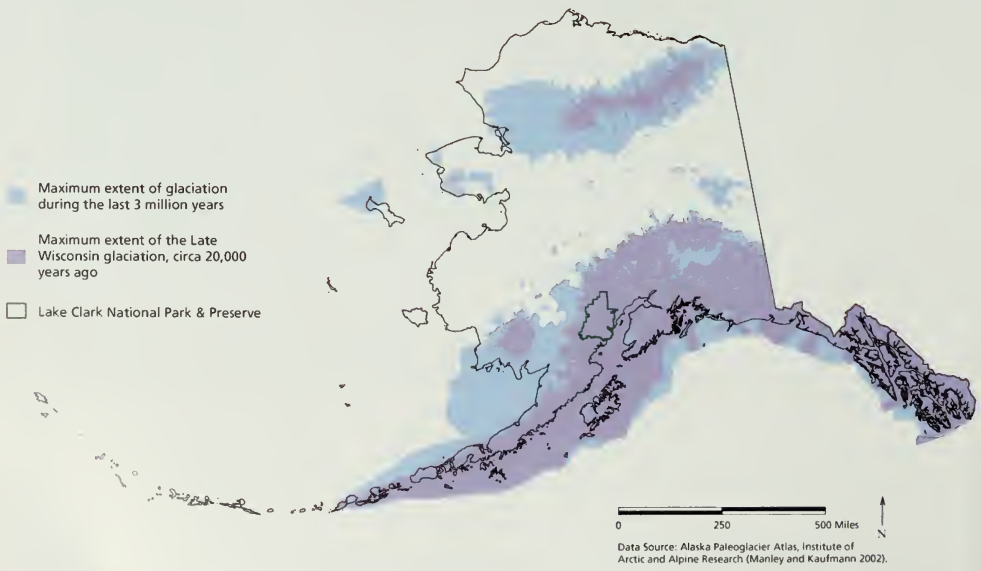
perspective, the shaking of the earth, and occasional eruptions of volcanoes have punctuated the human experience on these landscapes for millennia. A recent NPS publication, *Witness: Firsthand Accounts of the Largest Volcanic Eruption in the Twentieth Century* (Schaaf 2004), documents people's experiences of a tremendous eruption of Novarupta volcano on June 6, 1912. Novarupta is situated in what is now Katmai National Park and Preserve.

In December of 1989, shaken by intense seismic activity, Redoubt Volcano rumbled alive and began to erupt in a series of major and moderate explosive episodes over the following eight months. Drift Glacier stretches down the north slope of Mt. Redoubt. Tremendous amounts of glacial ice and surrounding snow were melted by the hot mixture of ash, pumice and rock fragments that flowed down from the volcano, contributing floods to the overall flow. Ash clouds of the first major eruption caused the loss of power in all four engines of a passing Boeing 747. Remarkably, the pilot was able to restart the engines after a loss of about four thousand meters (some 13,000 feet), and ultimately to land safely in Anchorage (USGS 1990).

More recently, in the winter of 2005-2006, Mt. Augustine—which lies to the Southeast of Lake Clark—erupted over a period of several weeks, spewing most of its ash fall into surrounding oceans.

What might such cataclysmic events mean for people and other species living in the surrounding environment? The broader environmental and cultural consequences for people who for generations have lived near volcanoes are multiple. How people adapt, psychologically and materially, to a potentially explosive backyard is an interesting question. Certainly resources are affected, but exactly how is unclear. Many authors characterize the Dena'ina, the Athabascan people who live throughout the park area and in a broader arch around Cook Inlet, as highly adaptable and mobile. Perhaps these are key traits needed to live in an unpredictable, occasionally explosive, and regularly frozen world.

Figure 3. Map of glaciations in the Lake Clark area.


Maximum extent of glaciation during the last 3 million years
Maximum extent of the Late Wisconsin glaciation, circa 20,000 years ago
Lake Clark National Park & Preserve
0
250
500 Miles
N
Data Source: Alaska Paleoglacier Atlas, Institute of Arctic and Alpine Research (Manley and Kaufmann 2002).

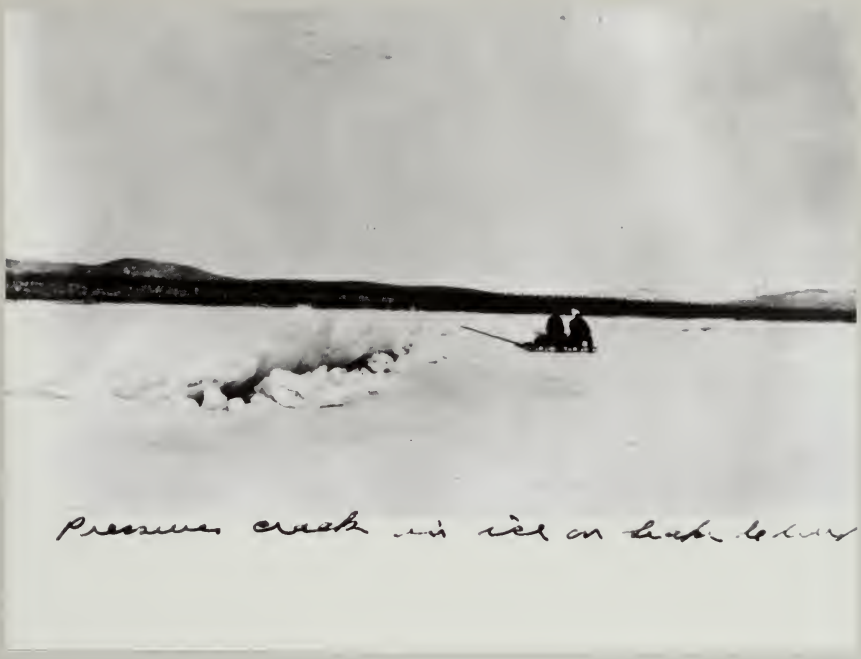


Photo 3. Pressure cracks in the ice are one of the many environmental features that residence of the Lake Clark area observe and monitor. Gauging safe ice conditions for travel and fishing reflects a small part of the wealth of ecological knowledge that people have of their surrounding world. NPS photo H81.

Hugging the very slopes of these volcanoes, as mentioned above, are long-term, but constantly changing glaciers. As Michael Collier described them,

> Glaciers are rivers of ice. They move from places where snow accumulates faster than it can melt to places where the snow melts faster than it can accumulate. As [the glacier] creeps down its valley, the ice is alternately squeezed and stretched while negotiating bends and bumps along the way. (Collier 2004:12)

When particular obstacles are too great, the ice can tear or break open, and crevasses are formed. This slow but forceful movement of glaciers over Alaska's terrain has been repeated many times over the millennia, through various cooling and warming trends.

Maps showing the various phases of glaciation throughout the Pleistocene illustrate that the Aleutian arm has continually been one of the regions under ice. This is in remarkable contrast to a belt across the middle portion of the state:

> Surprisingly, some fifty percent of Alaska shows no evidence of having ever been glaciated. The Yukon Valley remained ice-free during the cold Pleistocene epoch (from about 2,500,000 until 8,000 years before present), even though to the south Alaska was in the grips of successive glacial advance-and-retreat cycles. (Collier 2004:13-15)

The most recent glaciation, known as the "Brooks Lake glaciation," occurred between 25,000 and 12,000 years ago. In more recent generations, many Dena'ina elders can recount ways the landscape has been continually sculpted by the movement of glaciers (Ellanna and Balluta 1992:13-14).

Far more predictable than the relatively infrequent eruption of volcanoes, are the cover of snow and ice that blanket the area each winter. Longer-term glaciers are joined by the seasonal spread of snow across hills and tundra, and the freeze-up of lakes and rivers. Depending on the year, a landscape of ice and snow may settle in for more than half the year. The coldest temperatures for the area may get to around -50°F, while summer highs may range in the mid-80s.[8]

The frozen mantle of winter is not static. New layers of snow, varying temperatures, winds and foot or motor traffic over the snow can change its conditions and people's ability to maneuver across it. Additionally, people notice longer term shifts in the area's weather and climate patterns. Even a quarter of a century ago, Antone Evan, a Dena'ina from the Stony River area, noted a shift in the amount of snow experienced in a winter:

> We don't even have snow now (1980). Years ago, we used to have a lot of snow. Sometimes 6-7 feet of snow, and now most of the snow is 4 feet, 3 feet, not a long time. (Ellanna 1986:A-44; Ti65(2))

Whether frozen or flowing, water is a defining feature of these landscapes, and shapes people's subsistence and identities. Antone Evan once recited this beautiful account:

Qizhjeh Vena veq'atl'a tustes Dzeł Ken ghini.
/ Up at the head of Lake Clark, up in that valley, there are passes in the Alaska Range in both directions.

Niłq'a q'u łi yan nlan
/ on each side of the valley there are a lot of glaciers.

i ghini idghalzex ch'u yi łi ta'a ghini k'etnu k'etnu q'andazdlen
/ When the glaciers start melting, all the water flows into the river.

K'etnu q'andazdlen ch'u Chuqutenghehtnu [Little Lake Clark] *ghini*
yi edilax.
/ And then it forms Little Lake Clark.

Yi edilix ch'u Qizhjeh Vena ku'u edilax.
/ That glacier water forms *Qizhjeh Vena* [which is known as Lake Clark].

Yi dilax ch'u right down to Nundaltin Vena kiq'u hkadelax.
/ And then it flows into *Nundaltin Vena* [which is known as Nondalton Lake, Six-mile Lake].

Ch'u Nughilvetnu t'ech' kiq'u hkadilax.
/ And then that flows all the way down the Newhalen River.

Nila Vena dilax, Nila Vena edilax.
/ And then that forms *Nila Vena* [which is known as Lake Iliamna].

[8] For a record of snowfall in the area, and average yearly temperatures, see the statistics at http://www.nps.gov/lacl/weather_history.htm

Ch'u Nila Vena Q'estsiq' de'ech' [dut'ech'] kiq'u nik'udelax ch'u nuti atudelax.
/ And then it flows down into the outlet of Iliamna Lake [which is known as Kvichak River]. And then it flows right into the salt water,

Yi ɬi ta'a ghin nuti gheli edilax.
/ That glacier water [from the head of Lake Clark] travels all the way into the salt water.

ti ta'a ghini yet hqugh shughu daghiset qut'ana yich'a hqugh vin\ ni ghini qut'ana nughedeɬ na yich'a hqugh ndelax.
/ That glacial water travels farther than human beings, that water goes father than people can travel.

qeyeɬ dghinihi htsast'a hdi .
(Antone Evan 1981, Ti 72(1))

Photo 4. Iliamna Lake, at 75 miles long, is the largest lake in Alaska and one of the largest in North America. Dena'ina and Yup'ik people have long fished from its shores, and hunted from the freshwater seal population there. More recent tourist interests support a number of fishing lodges in the area. NPS photo.

Antone Evan described a southwestern flow that extends from the Tlikakila River, through Lake Clark Pass and down through Lake Iliamna into Bristol Bay, connecting mountaintops to the shoreline, and Dall sheep haunts to salmon habitat. But this is only one of many drainages that contribute to a complex network of rivers, streams and open sea that are home to numerous species of fish, as well as other fish and sea mammals that are used by Dena'ina people.

On their rocky courses downward, many of the drainages are caught in pockets, or widen out into lakes of various sizes. Lake Clark is the largest lake in the Park and Preserve; others, known as kettle ponds, are quite small, no more than an acre or so in size. These waterways provide habitat for a variety of fish, birds and other animals. Congress has designated the Mulchatna, the Tlikakila, and the Chilikadrotna Rivers as National Wild and Scenic Rivers.

While the Lake Clark National Park and Preserve boundary does not extend down to include the 75-mile long Lake Iliamna that Antone Evan includes in his waterways account, the park's eastern edge includes a stretch of shoreline on Cook Inlet, including Polly Creek to the north, Tuxedni Bay, and on around Iliamna volcano to West Glacier Creek and Chinitna Bay. Glacier melt from the Tuxedni Glacier and others flows into the Crescent and Johnson Rivers and into Shelter and Silver Salmon Creeks, draining to the sea as well, and providing habitat for spawning red and silver salmon.

HABITATS IN WATER, SHORES, SKIES, TREES AND TUNDRA

Thriving in the particular temperatures and nutrients of these various cold waterways are multiple species of salmon, trout, pike and grayling. Salmon, in fact, are one of the linchpin species in this region. They are the main food item for indigenous people in the area, central to the grizzly and black bear populations, and support a large fishing industry. They are also one of the central reasons why Lake Clark National Park and Preserve was formed, as is reflected in its founding legislation:

> The park and preserve shall be managed for the following purposes, among others: To protect the watershed necessary for perpetuation of the red [sockeye] salmon fishery in Bristol Bay; to maintain unimpaired the scenic beauty and quality of portions of the Alaska Range and the Aleutian Range, including active volcanoes, glaciers, wild rivers, lakes, waterfalls, and alpine meadows in their natural state; and to protect habitat for and populations of fish and wildlife including but not limited to caribou, Dall sheep, brown/grizzly bears, bald eagles, and peregrine falcons.[9]

Lake Clark drains into Sixmile Lake, which funnels into the Newhalen River, and those waters drain into Lake Iliamna. Lake Iliamna is fed by many other rivers and streams, including Iliamna, Pile, Kokhanok, Gibraltar and Copper Rivers, and Reindeer, Chekok, Lower Talarik and Upper Talarik creeks. All of these together form the headwaters of the Kvichak River that flows into Bristol Bay, which is the most important water system for sockeye salmon spawning in Alaska and, arguably, in the world. Around half of all sockeye salmon caught in Bristol Bay originate in the inner rivers and streams of the Lake Clark area. Once strong populations of sockeye have dropped significantly in recent years, however, and it is now considered a "stock of concern" by the Alaska Department of Fish and Game (ADF&G 2003). Populations have dropped by fifty percent in the past ten years, and resource managers are working to ensure larger returns (Anderson 2000).

Salmon still make up the greatest annual source of protein for Dena'ina subsistence users in the region. During the salmon run season, also a time when summer days are practically endless, entire families are out in fish camps, working long hours to catch and process fish. Salmon are filleted, dried, smoked, canned and frozen for consumption throughout the year. Past traditions included preserving fish in buried caches for later consumption (see Chapter 5).

[9] See related portions of ANILCA at: http://www.r7.fws.gov/asm/anilca/title02.html#201.

Salmon are also symbolically significant to people who have always depended on them. People are respectful of and grateful for salmon. Under modern scientific and medical scrutiny, salmon are found to be rich in omega 3 fatty acids, which are known to contribute to healthy brain and heart function. A diet rich in fresh salmon seems to agree with people, as many Dena'ina elders seem to glow with health well into their later years.

Native inhabitants and visitors alike fish for not only salmon, but for many other fish that inhabit the clear, cold lakes and rivers of these mountains: rainbow trout, Dolly Varden, lake trout, northern pike, and arctic grayling, blackfish, and arctic char. A number of marine mammals such as sea lions, beluga whales, harbor seals and porpoises occupy the waters of Chinitna Bay and Tuxedni Bay. Whales also sometimes pass through the waters adjacent to park lands.

Many species of birds cross Lake Clark National Park and Preserve through its airways, stopping to feast on rich shore foods, marshes and other food sources. Songbirds, eagles and hawks share the tree canopy of the region. Migratory waterfowl such as various species of duck and geese move through the area. These birds have been and still are hunted by the Dena'ina. Ground birds such as the ptarmigan and grouse are also hunted in the area, and serve as an important contribution to people's diets. Like the animals and fish, birds figure in Dena'ina stories and help to teach lessons. Raven is the most commonly found figure in Dena'ina *sukdu*, taking on multiple roles.

The jagged, snowy peaks of the Chigmits are the upper extensions of slopes that support white spruce and black spruce. Dense growth of alder follow drainage areas down in sometimes impenetrable masses. As the slopes level out onto more gradual, open and flat areas, meadows, bog and marshes support countless species of grasses, berries and other plants. Blueberries are found in more open woods and out on the tundra, as are low and high bush cranberries. Dena'ina gather around twenty different species of berry, including as salmonberries, raspberries, nagoonberries,

Photo 5. Cassiope tetragona *(white arctic mountain heather), found on the Telaquana plateau. NPS photo.*

Photo 6. Lousewort, probably Pedicularis langsdorffi, *found in meadows and on stony slopes. Inland Dena'ina call it ch'anjidi yelqet'i, "that which bees eat" (Russell Kari 1995:156). NPS photo.*

crowberries, currents, serviceberries and many others in great quantities. Berries provide an important staple in their annual diet (see Chapter 5 for a more detailed discussion). Bears, birds and other animals depend on the rich berry sources in the area as well (Russell Kari 1995).

The dynamic landscapes and varied ecosystems of the Lake Clark region provide habitat for numerous animal species. Both black and brown (grizzly) bears are found throughout the region. And while moose graze in marshy and grassy lower elevations, caribou migrate through areas around some of the high mountain lakes such as Turquoise, Twin and High lakes. Dall Sheep are well suited to maneuver about on the steeper peaks of the Chigmit mountains.[10] Lynx, red fox, coyotes and wolves are also found throughout the Park area, as are river otter, wolverine, weasels, mink, hares and beaver.

Below the surface of lands teeming with a variety of plant and animal life lay potentially valuable minerals and ore. Joan Townsend noted the early efforts of several prospectors to extract ore, and observed:

> In the greenstone and limestone outcroppings of the southeast shore just west of the Iliamna River village are found deposits of copper and silver. Copper and silver deposits are also found across the portage at Iliamna Bay on the Cook Inlet side of the mountains. Here, too, the presence of gold has been rumored. (Townsend 1965:11)

Early 20th century prospectors were forerunners to a current proposed open-pit copper and gold mine some 18 kilometers west of Nondalton. The Northern Dynasty mining company is moving forward with plans to open the largest open-pit gold mine, and the second largest open-pit copper mine in North America. Some local residents are supportive of the idea, as they are eager to see opportunities for employment come into the area. There is growing resistance to the project among other residents, however, who are deeply concerned that fisheries, other subsistence resources, water and air quality, and the long-term viability of the area will be negatively affected.

CHAPTER SUMMARY

From even this brief introduction to the Lake Clark Park region, one can begin to appreciate the great geological vibrancy, biological diversity, and cultural history of this unique and remarkable segment of greater Alaska. The natural and cultural resources within its boundaries are vital to the surrounding region. In particular, subsistence resources provide essential annual livelihood for the peoples who have inhabited these mountains and lake areas as homelands for generations. They are also significant in the broader context of world salmon markets, and resource preservation that national parks seek to care for throughout the United States.

[10] For more information on park wildlife, see the park website: http://www.nps.gov/lacl/pphtml/animals

Historical Overview of the Dena'ina People in the Lake Clark and Lake Iliamna Area by Michelle Ravenmoon

1,000 AD Dena'ina shift: from caribou to salmon

1170–1902 Kijik Village

1750 Russian Post I in Pedro Bay

1796 Russian Orthodox priest Juvenal in Kijik

1821 Russian Post II built at Old Iliamna

1838 –1936 Old Iliamna Site

1847 Russian Orthodox priest visits Mulchatna and performs marriages, baptisms, and holds services

1700's — 1800's

Zackar Evanoff 1921

1901-1936 Old Man Zackar Evanoff, Chief of Kijik

1901-02 Measles and influenza epidemic in Kijik. Dena'ina start to move to new location: Old Nondalton

1890 Gold miners Arrive

1897 Forest fires in Lake Clark –Mulchatna area caused by the prospectors J.W. Clark and Schanz renamed Qizjeh Vena to Lake Clark

Holy Cross Chapel constructed at Kijik

By early 1900s Dena'ina men start working at Bristol Bay canneres

1882 Alex Flyum marries Annie Ricteroff, first permanent Euro-American resident on Lake Iliamna

1867 Alaska is purchased by the United States

1901-1910 Cottonwood Bay Post office serving Lake Iliamna and Lake Clark area

1900's — 1900's

1908 First school built in Old Iliamna

1909 Old Nondalton settled

Old Nondalton School 1930s

1912 Fred Roehl Sr. Postmaster in Old Iliamna

1913 Owned store in Old Nondalton and Old Iliamna

1914 Hans Severson Trading Post in Old Nondlaton, moved post to Iliamna in 1920's

1914-18 World War I

1914 Trading Post in Qeghnilan "Canyon Village"

1927 Russell Merrill first pilot to fly into Bristol Bay area from Anchorage

Old Iliamna 1927

1930's Dena'ina men start fishing in Bristol Bay

Early 1900's — 1900's

Mary Hobson 2004

2001 Dena'ina join Athabascan Language Program with University of Fairbanks to revive language

1972 Alaska Bilingual Program started

1971 chieftainships end in Nondalton, replaced with a city council

Gabriel Trefon 1921

1947 Gabriel Trefon becomes chief of Nondalton in Nicholi's absence

1945 Segregation of Alaska Natives outlawed

Chief Nicholi Balluta is recruited in World War II

1930 New site of Nondalton founded

1939-45 World War II

Alexi Balluta late 1930's

1936 Alexi Balluta, "Dada ka'a" Chief of Old Nondalton

2004 — 1900's

Waves and rocks on the shore of Lake Iliamna.
Photo by Erin McKittrick.

Dena'ina Origins and Prehistory

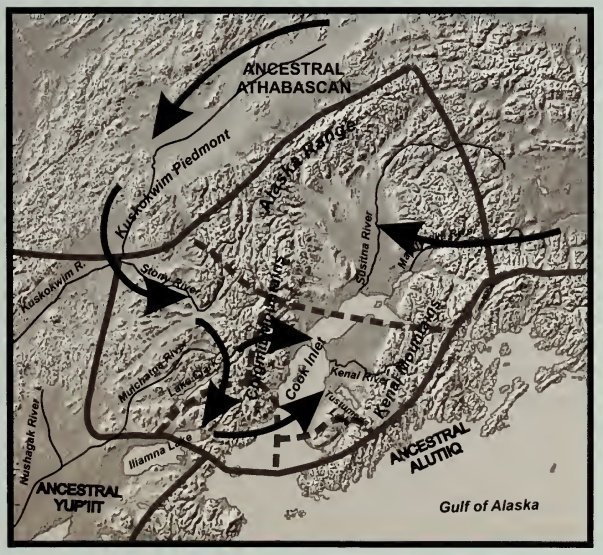
By Alan Boraas

This section covers two important events during the time before European contact: Dena'ina origins in South-Central and Southwestern Alaska, and the advent of intensive salmon fishing that led to sedentary Dena'ina villages in most parts of their territory. While much has been learned about Dena'ina prehistory, the time before a written record, future research by Native and non-Native scholars will clarify the picture even more.

Dena'ina Origins

There are a number of types of evidence that bear on Dena'ina origins including oral tradition,[11] cosmology, linguistics, and archaeology. In some cases the evidence or points-of-view are contradictory and consequently there are several general scenarios or hypotheses about Dena'ina origins. There is evidence suggesting Siberian origins for the Dené while there is other evidence to suggest a southern origin of the Dené people. Both points of view will be presented in this section without judgment. Future evidence will support one or the other migration scenarios and likely add to the complexity of the story.

Figure 4. Probable movements into Dena'ina territory based on oral tradition, mythology and linguistic information.



[11] Unless otherwise cited, information on origins from oral tradition is primarily derived from Dena'ina elders Peter Kalifornsky and Nellie Chickalusion, and from Ahtna elder Katie Wade. Kalifornsky, Chickalusian and Wade recounted these stories to Donita Peter who explained this perspective to Alan Boraas. Peter Kalifornsky also relayed some of this information to Alan Boraas.

Evidence from Dena'ina Oral Tradition

One version of Dené oral tradition holds that the Dené arrived in the north from the south and are culturally, linguistically, genetically, and spiritually related to the Navaho and Apache of the Southwestern United States (Donita Peter, personal communication 2003). According to this oral tradition, at a point in the distant past a group of Southwestern Dené occupied Pleistocene margins and followed the retreat of glacial ice north making their way into present-day subarctic Canada eventually arriving in Alaska. This version generally conforms to Kari's (1996) linguistic hypothesis in which Dené occupy Alaska from the east moving down the major river systems as discussed below. Neither Kari, nor other linguists, however, see evidence for the proposition that the Southwestern Dené are ancestral to all Athabascans.

Once in Alaska, the oral traditions of how Dena'ina moved into their present territory are much clearer; the movement came from two directions as indicated in Figure 4. One migration came from the east moving into Dena'ina territory via Chickaloon Pass from the Copper River area becoming the Upper Inlet Dena'ina. Shem Pete stated that Upper Inlet occupation was of long duration and that Dena'ina never jointly occupied the Susitna Valley with anyone (Kari 1988:333; 2003:14).

The other migration was from the north via the Kuskokwim drainage. The Stony River/ Telaquana band of Dena'ina are known as *Htsaht'ana* meaning "First People" (Kari 1996:60) and a story recorded by Pete Bobby of Lime Village opens with the phrase *K'qizaghetnu qeł hdghinih natuda naguna*, "They say our ancestors were from K'qizaghetnu" (Bobby 1978:1). *K'qiqaghetnu* refers to Stony River (Kari and Kari 1982:16), and is the furthest west point in current Dena'ina. Kari (1988:328) points out the people call the piedmont in this area *Htsaynenq'* "west of the Alaska Range," an area perceived to be the Inland Dena'ina homeland (Kari 1988:328).

One of the most important Dena'ina origin stories occurs in three written versions: one told by Alexi Evan to Anna Rooth (1971:68-70), the second transcribed by James Kari from a recording by Alexi Evan, and the third titled "Imagination" written by Peter Kalifornsky (1991:72). These are part of an as yet unrecorded story cycle that will, perhaps, further define Dena'ina origins. In the story hungry, starving Dena'ina from the north move to the mountains where a spiritually powerful person, perhaps a *dghili dnayi* or mountain spirit that has taken the form of an old man in the Kalifornsky version, magically opens a mountain using a stick allowing the people to enter the mountain where they find great quantities of game animals and become prosperous.[12]

The mountain is almost certainly Telaquana Mountain or *Nduk'eyux Dghil'u* "Mountain Which Game Enters" (Kari 1988:328) east of Lime Village at the headwaters of the Stony River. Symbolically, starvation indicates some problem--perhaps literally starvation or perhaps something else--which caused a movement south and then east from the Kuskokwim plateau, and the solution to the problem is found in the abundance of game in the mountains of western Dena'ina territory where the people thrive.

Clan origin stories are also informative about Dena'ina movements although not necessarily movement of the original Dena'ina. For example, Kalifornsky's "The Dena'ina Clans" contains the following passage (Kalifornsky 1991:205):

[12] A spiritually endowed stick such as used in the Telaquana Mountain Story exists in the Mellick Collection (Nick Mellick, personal communication, 2001).

> Nulchina, The Sky Clan people, they say, stayed in the sky on a frozen cloud; and they drifted over this way to a little warmer place, and the frost melted away from under them, and they landed on top of Mount Susitna, they say. And they went down the Inlet, and they came to Iliamna. And they called the people already living there *Dudna*....

The movement of the people from a colder place "to a little warmer place" suggests movement from beyond the Alaska Range to Cook Inlet. The Dena'ina name for Yup'iit is *Dudna*, and the story thus defines the southeastern boundary of Dena'ina territory in the Iliamna Lake area. Upper Inlet clan origin stories depict the close relationship between the Upper Inlet Dena'ina and Ahtna with several clans entering Cook Inlet from Ahtna territory (Kari 1988: 333). De Laguna and McClellan (1981:653) indicate Ahtna origin stories describe movement from Copper River to Cook Inlet.

War stories have the effect of defining "us" and 'them." Kari (1988) and Tenenbaum (1984:232-268) identify a significant genre of war stories between Dena'ina and Yup'iit centering in the Iliamna Lake and Mulchatna River areas suggesting that this borderlands was contested territory.[13] A Dena'ina culture hero *Ts'anhdghulyaɬ* figures prominently in the stories. Other stories set in the Stony River area also portray conflict (Kari 2003:144-147), but they do not contain agents like culture heroes and other symbols of identity as do the Dena'ina/Yup'iit conflicts suggesting mutual use with Deg Hit'an and Upper Kuskokwim people (Kari 1988:329). Kari suggests this is further evidence that the plateau area northwest of the Stony River (*Htsaynenq'* "west of the Alaska Range") was part of a long established Dena'ina or ancestral Dena'ina homeland and not contested allegorically or otherwise.

A similar set of war stories occur in Cook Inlet with Alutiiq (*Uɬchena*) usually coming up the Inlet to attack Dena'ina villages. The tone of these stories is less allegorical and more historical, however, and may not reflect territorial conflict but Alutiiq attempts to force bilateral trade. Osgood (1976:109-110) has pointed out that maritime Alutiiq territory contained few resources the Dena'ina needed, but the Dena'ina controlled subarctic resources mostly in the form of furs the Alutiiq needed. Consequently, the Alutiiq desired to trade with the Dena'ina, but the Dena'ina did not need to trade with the Alutiiq. To attempt to coerce bilateral trade, Alutiiq raided Dena'ina villages taking women hostages who were then held in ransom to force trade. Sometimes the Dena'ina would repel the attackers, sometimes they would acquiesce to the trade, and sometimes they would counter-attack in retaliation. However it played out, the Dena'ina controlled the trade because they controlled the desired resources.

Evidence from Cosmology

Traditional Dena'ina cosmology rested on the premise there are at least six dimensions operating in parallel time and space (Boraas and Peter 2005). These dimensions consisted of humans, ancestors, animals, animal spirits, spirits, and *Naqeltani*, a state of purity or pure love. One concept--that there were mechanisms of communication between the dimensions, one form of which expressed by the concept of *beggesh*-- is potentially reflected in the prehistoric artifact record, or, rather, lack of an artifact record.

Beggesh is a form of negative energy, often described as being like a scent that permeated an artifact. If an artifact were used by a person with ill will such as in a murder or other heinous act,

[13] Yup'iq refers to one person or to the language spoken by this group; Yup'iit refers to several people or the group as a whole.

it was believed to permanently take on information of that act. Acts of lesser evil, even thoughts of ill will, could likewise leave their scent on an owner's artifact. *Beggesh* could be detected by a shaman or a spiritually powerful person who had achieved a state of true belief and become a *K'ech Eltanen* (Boraas and Peter 1996), but it could also pass into the other dimensions and be detected by animals, ancestors, or spirits. If an animal sensed an artifact's *beggesh* it would likely withdraw from the area and thus *beggesh* was believed to have implications for survival. Likewise artifact *beggesh* was offensive to ancestor spirits and the other spirits such as *dghili dnayi*, 'mountain people' or *ch'wala dnayi* "tree people" who might then haunt the village, house, or person that did not control his or her artifacts. Artifacts could also absorb "good" information in which case it was called *beggesha*, but this was of less concern than *beggesh* because it had no negative impact on the ancestor spirits, spirits and animals.

Because of *beggesh* artifacts potentially carried threatening information and were carefully accounted for and not casually discarded (Boraas and Peter 2005). Upon death, one's personal effects were burned (Osgood 1976:165-168) and therefore purified in the funeral cremation, which was practiced before Russian Orthodox influence, both to prevent negative messages from being transmitted to animals and to provide tools for use by the deceased in the ancestor dimension (Donita Peter, personal communication, 2004). Since there are few sites that we can attribute to the prehistoric Dena'ina which contain abundant artifacts, the concept of *beggesh* may be very old and the Dena'ina multi-dimensional cosmology may extend well back into prehistoric time with lack of artifact refuse a defining trait of Dena'ina sites.

Lack of bone refuse from eating hunted animals is another characteristic of Dena'ina sites that has spiritual implications (Boraas and Kalifornsky 1991). Pre-contact Dena'ina believed that it was necessary to send hunted and subsequently consumed animals back to a "reincarnation place" presided over by *K'unkda Jelen*, 'The Mother of Everything Over and Over' (Kalifornsky 1991:40-45). This was done by an informal ritual of burning bones in the fire or distributing them in the water. At the reincarnation place they would "put their clothes on" meaning they would become alive again and return to the human land to again become an animal. Thus concepts of ecology are encoded in the cosmology and, unlike archaeological sites from other non-Dené cultures in Alaska in which huge piles of animal bone refuse called middens are found, it is rare to find even small middens in Dena'ina archaeological sites.

Evidence from Linguistics

A number of linguists have attempted to identify the ancestral Athabascan homeland and hence the place from which the Northern Dené diaspora emanated. Krauss and Golla (1981:68) place ancestral NaDené territorial homeland in the Upper Yukon River drainage in the vicinity of the Alaska, Yukon, and British Columbia borders, the general area where Northern Athabascan, Eyak and Tlingit meet. Kari (1996) places the Northern Athabascan nucleus further to the southeast at the continental divide where the Yukon, Mackenzie, and Stikine watersheds meet near Dease Lake in Northern British Columbia Kaska territory. Dumond (1969) and Greenberg (1996:530-531) proposed the same Na-Dene homeland, British Columbia interior from Southeast Alaska, on the basis of the distribution of Athabascan, Eyak, Tlingit and Haida languages. Thus there is general agreement the most likely ancestral Northern Athabascan homeland, and therefore the point from which prehistoric Athabascan diaspora must have proceeded, is interior northern British Columbia.

Greenberg (1996; Greenberg, et al.1986) is one of the primary proponents of the Three Wave Theory of Native American origins which combines linguistic, archaeological and genetic

information to compose a theory that the peopling of North America came in three waves called Amerindian, Na-Dené, and Eskimo/Aleut respectively.[14] To Greenberg the Amerindian language family (including all Native Americans except NaDené and Eskimos) shows the greatest amount of language variation hence has had the longest time to evolve and is further from Asia and, therefore, comprises the first wave of migration; Na-Dené languages exhibit the next highest degree of variation and are of intermediate position from Asia, between Amerindian and Eskimo/Aleut and comprise the next wave;[15] and Eskimo/Aleut languages have the least amount of variation and are closest to Asia and, therefore, are the last wave. It is likely the situation is more complicated than the three wave hypothesis suggests and some linguists question the validity of the "Amerindian" language area entirely (cf. Nichols 1990).[16]

One of the Siberian Yenesian languages, Ket, has been identified by Vajda (1999) as having a grammatical structure similar to American Athabascan languages and is the most compelling evidence to date of Asian and North American connections because the intricate grammatical structure of Athabascan verbs is so unique and complex that the likelihood of independent invention is virtually impossible. However, whether the movement implied by this Siberian/ Alaskan connection was west to east or east to west, remains to be determined. Assuming the movement was from Siberia to Alaska, ancestral Ket may be related to the appearance of Dené in Alaska and the archaeological culture of these first Athabascans was likely the Paleo-Arctic culture which, unlike other early archaeological cultures in Alaska, has antecedents in Siberia. Timing, of course, is a major part of the origins issue. On the basis of a method of estimating the time when two similar languages diverged (glottochronology), Krauss (1980:11-12) makes the following interpretations:

1. Ancestral Athabascans were present in Alaska and Yukon before 4000 B.C. the point at which ancestral Athabascan and Tlingit differentiate.
2. Eyak was the first to differentiate from ancestral Athabascan and that split occurred around 1500 B.C.
3. Differentiation into the rest of the Northern Athabascan languages, including Dena'ina, occurred by 500 B.C.

While subject to further refinement, these dates provide good evidence of the minimal date of the antiquity of Dené in Alaska. With improved methodology these dates will probably turn out to be much older.

Kari (1996) has developed the most complete hypothesis of Dena'ina origins which is part of his overall theory of Northern Athabascan expansion. He proposes that Athabascan groups expanded in five stages from the Northern ancestral Athabascan homeland in Northern British Columbia described above. In Alaska, Athabascans expanded by moving down the Yukon, Tanana, Kuskokwim and Copper river systems in the process differentiating into various linguistic groups. Kari bases his hypothesis on the distribution of river stem terms which change as one proceeds downstream from the Upper Yukon from **-tu'* in the core Northern British Columbia area, to **-niq'ə* in the Gwich'in, Tanana, Han area, to **-na'* in the Ahtna, Deg

[14] Na-Dené is a language family that includes Athabascan languages, Eyak, and Tlingit, with speakers in Alaska, Northwest Canada, Oregon and California as well as in the Southwest of the United States.

[15] Greenberg and Dumond followed Edward Sapir's original assertion that Na-Dené included Haida. Kari and Krauss do not consider Haida as Na-Dené. For the latter scholars, therefore, the language center shifts north.

[16] Many linguists (e.g., Nichols 1990) dispute the view that Amerindian represents one language family. They interpret the high degree of phonological and structural diversity within Amerindian to mean that there are multiple language families, perhaps reflecting multiple migrations rather than a single *in situ* evolution in North America.

Hit'an, Upper Kuskokwim, and Dena'ina area (Kari 1996:260). River stem terminology is not trivial. Rivers are integral to subsistence and transportation and form the basis of the intricate Athabascan directional system. Moreover, rivers are part of Athabascan identity particularly in Alaska where they are so closely tied to salmon harvesting. Hence, a linguistic change in river stem terminology is a significant boundary marker between groups and, as Kari has proposed, reflects prehistoric movements and the differentiation of one Athabascan language group from another.

The group that eventually became the Dena'ina had been part of this ancestral Athabascan core that moved down the Yukon River and eventually became established in the Upper Kuskokwim piedmont known as *Htsaynenq'* recognized as the ancestral Inland Dena'ina home as mentioned above. At that point in time the people might be considered ancestral Dena'ina and not yet differentiated from ancestral Upper Kuskokwim (whose word for themselves is also Dena'ina) and Deg Hit'an and would have occurred before about 500 B.C. according to Krauss's age estimate. Kari's hypothesis has ancestral Dena'ina differentiating from the Upper Kuskokwim as they moved into their present Inland and Iliamna territory (Kari 2003:144-147). About the same time ancestral Athabascans moving down the Copper River established what became Ahtna territory with a portion moving into the Susitna drainage contributing to the close language similarity between the Upper Inlet dialect and Ahtna language. The similarity of Upper Inlet Dena'ina to Ahtna and the dissimilarity of Outer Inlet Dena'ina to Ahtna and Upper Inlet Dena'ina indicates upper Cook Inlet was occupied by Athabascans coming from the east while Outer Cook Inlet was occupied by Dena'ina coming from the west, either Iliamna dialect speakers or Inland dialect speakers (Kari 2003:13). The close similarity of Outer Inlet Dena'ina to Iliamna Dena'ina (James Kari, personal communication, June, 2004) suggests the Dena'ina

Figure 5. Athabascan stem words for streams showing possible prehistoric movements. Adapted from Kari (1996).

occupation of Cook Inlet may have come from the low pass connecting Iliamna Lake to Tuxedni Bay although, as Kari points out movement could also have been through Lake Clark Pass or Merrill Pass (See Figure 5).

Throughout Dena'ina territory, even on the Kenai Peninsula where a known presumed Yup'ik or Alutiiq speaking culture represented in the Kachemak tradition predates the Dena'ina, there is little evidence for archaic Eskimo or non-Athabascan place names (Kari 1988:327). This may attest to the incompatibly of the very distinctive Dena'ina language to accommodate non-Athabascan words or, more likely, to the long duration of Dena'ina in their territory. Dené may have occupied south-central and southwestern Alaska from the beginning and Kari's two-directional occupation of Cook Inlet is the basis from which further research of Dena'ina origins should proceed. Stated a different way, some elders, such as the late Albert Baktuit, say the Dena'ina have been here "forever."

Evidence from Archaeology

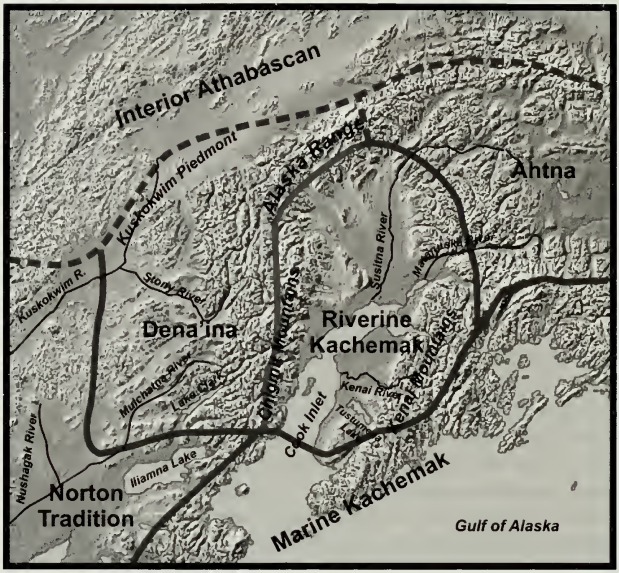
By 8000 BC post-Pleistocene warming caused glacial retreat and made occupation of Dena'ina territory possible although it was not until about 4000 BC that all habitable areas became ice-free and substantial ice field remnants of the Ice Age remain to this day (Reger and Pinney 1996). A reasonable archaeological scenario holds that a Paleoarctic culture distinguished by microblade/core artifacts, possibly brought by an ancestral Ket-speaking population mentioned above, crossed from the Russian Far East to Alaska and became the ancestral Athabascan population in the North. Another possibility is that these pre-Dené interacted with indigenous peoples already established in Alaska represented by the Chindahdin complex of artifacts.

Cook and McKennan (1971) thought the 8,000 BC Chindahdin sites represented the original Athabascans but the artifacts have no apparent connections to Siberia and at least one interpretation is they have similarities to artifacts to the south (cf. Bever 2001) suggesting the Dené oral tradition that Northern Athabascans migrated from south to north may have archaeological support. Either way we can assume that these early Athabascans hunted caribou and small game, trapped, fished, and gathered plant foods in a nomadic movement around their territories. A 7000 BC Paleoarctic site in the Lime Hills in western Dena'ina territory is evidence of this event (Ackerman 1996:473).

The southcentral Alaska the Paleoarctic culture gave way in certain areas to a poorly known Northern Archaic influenced culture distinguished by stone points with side notches. In some cases, Marine-oriented slate tools—known to archeologists as Ocean Bay technology—were adopted by Athabascans in interior areas such as Iliamna Lake and the Sustina Valley where they were used in non-marine hunting and fishing (Reger and Townsend 2004; Dixon 2003).

Beginning in 1500 BC, Yu'piq speakers with Norton-style artifacts (such as harpoons and kayaks typical of coastal Southwest Alaska expanded probably via Iliamna Lake into Cook Inlet becoming the sedentary Riverine Kachemak tradition (Reger 1998:169) with major sites in the Kasilof, Kenai and Susitna drainages and displaced the resident Dené nomadic hunters (or pushed them to the mountains). Riverine peoples fished for salmon in the main channels of large rivers using spruce root drift nets held down by stone net weights (Boraas 2002a). Although the archaeological record is not as developed, a similar Yup'iit style culture probably existed in the middle Kuskokwim, Nusagak, and lower Mulchatna drainages during the same time period. Dena'ina peoples maintained a nomadic caribou hunting pattern in the Inland area.

Figure 6A. Prehistoric Cultures in South-Central Alaska 1000 B.C. to A.D. 1000. The Dashed lines are approximate boundaries.



Shifts in Dena'ina Technology and Social Structure 1000 Years Ago

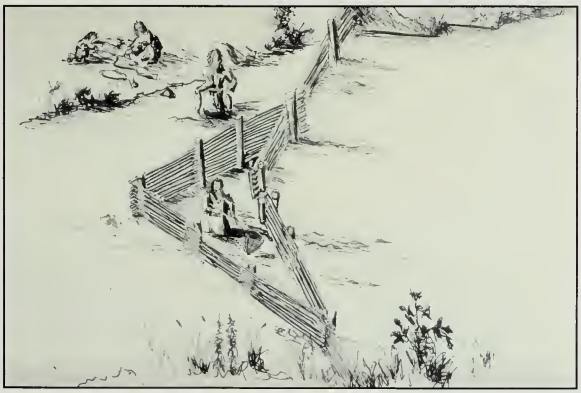
Though the Riverine people primarily fished for salmon, they lacked the ability to store fish on a large scale. Because of limited storage technology, the harvest of salmon and hence the population size would have been limited not by the number of fish they could catch and process, but by the number of fish they could store.

About 1000 AD the Dena'ina of the Lake Clark area developed a method to catch and store salmon using weirs and store them in underground cold storage pits called *ełnen tugh* (Kenai dialect) and the idea spread and led to the withdrawal of the Riverine culture from Cook Inlet where they were replaced by the now sedentary Dena'ina. Rather than drift fishing in the major rivers, weir fishing focused on fishing tributary streams and side channels. A stout pole and wicker dam was built that blocked fish movement but permitted water to pass through. The damned fish were then picked, cleaned, dried, and stored. When not fishing, a gate was opened and spawning salmon proceed upstream. In this way large numbers of salmon could be harvested. Underground cold storage pits provided the means to store fish for consumption leading to larger populations and to provide a surplus becoming the basis of the emergence of Dena'ina political and social complexity—along with the Ahtna the most complex in pre-contact Northern Athabascan territory. They consisted of a pit lined with birch bark and moss and layered with dried fish and grass during fall freeze-up. The fresh frozen fish were eaten throughout the winter and spring until the next summer's salmon run. In the event of spoilage or loss of stores to predators, surplus frozen fish could be acquired from partner villages through the *Qeshqa's* (chief's) formal partner the *selden*, or from villages allied by marriage.

Two places in Alaska where underground cold storage technology evolved and proved beneficial were Dena'ina territory and Ahtna territory. The technology required 1) large numbers of salmon moving into tributary creeks or side channels (weirs cannot be used in the main channel of large, swift flowing rivers) creating a concentrated biomass, and 2) frozen ground but not permafrost. Only in pockets of southcentral Alaska, notably the middle to upper Mulchatna River drainage, Lake Clark, the Upper and Outer Inlet territory as well as the middle Copper River is there winter frozen ground without permafrost and substantial fish runs easily collected from small tributary streams and side-channels. The Slikok Creek site on the Kenai Peninsula has 91 underground cold storage pits surrounding five prehistoric houses.

Weir technology and the surplus of stored fish probably triggered the shift to a strong clan-based structure to organize labor for intensive fishing. A village consisted of men of a matrilineal clan and their wives from opposite clans (called moieties). The village people were called *nakilaqa* or clan helpers and the stored food resources were controlled by the *Qeshqa* who then redistributed the stored food back to the clan helpers as needed throughout the winter or shunted surplus food to his or her partner should an emergency arise. Unlike their nomadic ancestors, the people lived in sedentary villages consisting of substantial log houses, *nichił*, near tributary streams. When not fishing, they hunted, gathered plants, and trapped furs.

Figure 6B. "Working at the Weir," an interpretation of a precontact Dena'ina weir based on Osgood 1976, drawn by Bill Thomas.



Radiocarbon dates from *nichił* and related structures indicate sedentism spread through Dena'ina territory starting around A.D. 1000 (Reger and Boraas 1996). Sedentism probably originated in the Lake Clark area (see Lynch 1982 for a discussion of the important Kijik Site) where radiocarbon dates of sedentary houses are slightly earlier than other places in Dena'ina territory. The Inland area lacked a resident Riverine Kachemak occupation and intensive weir fishing probably emerged from greater reliance on increasing salmon and a relative decrease in reliance on caribou and coincides with climatic/ecological changes associated with the Medieval Warm Period (Mann et al. 1998). The successful technology then spread to Cook Inlet where Dena'ina replaced the 2000 year incursion of the Riverine Kachemak people who had not developed large-scale storage capability.

The first salmon ceremony recorded by Osgood (1976:148-9) and a salmon ceremony recorded by Shem Pete (Kari and Fall 2003:184-190) both depict the origin of intensive salmon fishing. In both instances the stories indicate the Dena'ina already occupy their territory and thus these are not a mythology of migration but a mythology of cultural adaptation. In Osgood's story a chief admonishes his daughter not to go near the salmon weir; she does, slips into the water, and disappears. A few years later the chief sees his grandson in the form of a salmon in the weir and initiates the first salmon ceremony done each year in recognition of the Dena'ina becoming salmon people.

FROM PREHISTORY TO HISTORY: DENA'INA CONTACT WITH OUTSIDERS

What typically marks the break between the prehistoric and historic periods is the introduction of print language, or other written records by or about a group. For many indigenous peoples in the world, this shift often comes with contact from outsiders who use writing systems. For the Native populations in southern Alaska, this contact was with Russian trappers and traders in the mid-to-late eighteenth century, and the missionaries that soon followed.

Historians and anthropologists for the Dena'ina region typically make efforts to divide the nearly three centuries since the first Russian contact into organizational periods (Townsend and Townsend 1961:52-53, Fall 1987). In the Townsend model, a series of Early (1741-1784), Middle (1784-1799), and Later (1799-1867) Russian periods mark respectively Russian early contact and settlement on Kodiak Island, a monopoly on trade through the Russian American Company, and from the peak of Russian control up to the sale of Alaska to the United States (see also Fall 1987). The Townsends' Early (1867-1895), Middle (1895-1918) and Late (1918 to the present) American periods mark the purchase of Alaska to the beginning of the gold rush, the stampedes to the first influenza epidemic, and from there up to the present.

Anthropologist James Fall points out that these milestones mark events that are initiated by and are of significance to people primarily outside of the region. Fall uses various phases of contact history (following Helm et al. 1975), with a shift to the perspective of local people's experiences, to rethink historical periods. He suggests the following:

1. Incipient-Early Contact Stage: From the beginnings of the Tanaina response to European culture and its agents to the smallpox epidemic in the 1830s.
2. Contact-Traditional Stage: From the smallpox epidemic to the gold rush and "stampedes" of the 1890s.
3. Government-Commercial Stage: From the gold rush and the beginning of permanent white settlements until the present. (Fall 1987:11)

Delineating historical periods is useful in organizing analyses of a complex series of events. However, the overall effect can lead to the inscription of divisions that, once scored, are hard to erase. Such divisions impose a retroactive sense that sets of things happened, and that change is marked at the junction between one period and another. There is the problem, too, of marking the beginning of these sets of periods at "contact." "Pre-contact" and "post-contact" labels suggest that the beginning of interaction with Russians was some sort of departure from a previously isolated or "uncontacted" state.

Native groups throughout the regions of what became Alaska and Canada undoubtedly had been in touch with one another via migration, warring, trading, intermarrying, and borrowing technologies for millennia before 1741 when people arrived from Russia.

> In fact, oral and early historic, linguistic and archeological evidence suggest the existence of precontact trade networks, through which distribution of aboriginal and early European material goods and, presumably, ideas occurred. Trade and other social networks extended minimally to coastal Dena'ina, the Ahtna Athabascans of Copper River, and the Yupik (Alutiiq) of southwestern Alaska, Kodiak Island, and Prince William Sound. (Ellanna and Balluta 1992:58)

To emphasize the moment of "contact" between Native peoples and Russian fur traders should not imply a vast block of isolated "pre-contact" time, as that would privilege one kind of contact as more historically significant than others. Arguably, some moments of contact are more significant than others. But, as James Fall invites us to do, were we to view a world of events from local perspectives, they might not unroll as a series of events on a timeline, or in clumped periods, at all.

Cultural interactions did not affect all Dena'ina, Russians, or Americans the same way. Whether through trade, religious conversion, marriage, friendship, sickness, quarreling, domination, resistance, murder, enjoyment of new foods, assistance in the depths of winter, appreciation of mutual economic benefit, or various combinations of all of these and

more, "contact" was not a singular event with uniform consequences. Even through the course of interacting with one another, the Dena'ina were reshaped, as any group is through millennia of exchanges.

While Russian and Euroamerican influences on Alaska Natives were not always welcome, predictable or controllable, change was not a one way street. Acculturation was often multi-directional in experiences of interaction between cultures, despite or in addition to domination and abuses. Russian and American trappers, traders, gold prospectors and others quickly learned and adopted local means for hunting, cooking, clothing themselves, and surviving in a cold and unfamiliar land. Still, massive irrevocable cultural change for Alaska Natives was set in motion by the arrival of Russians in the area (see Black 2004).

RUSSIAN CONTACT

Following the Bering-Chirikov expedition of 1741-42, from Russia to what is now Alaska, numerous Russian traders crossed the waters to the rocky shores of the North American continent in search of sea mammals and their furs. Aleut villages along the Alaska Peninsula and on Kodiak were the first and most intensively affected. Those on the Kenai Peninsula and on coastal areas were also affected as aggressive Russian trappers took hostages, enforced labor in sea otter hunts, and offered unfair trade for the pelts of animals. Weapons technology, determination, and frequent brutality meant that small numbers of Russians gained dominant positions over Alaska Natives in the early fur extraction. Effects of Russian presence slowly penetrated into interior areas. Contact between inland Dena'ina and foreign fur trappers occurred perhaps by the 1790s, somewhat later than with Native groups in coastal areas (Hornberger 1986:4-8; Townsend 1965:33).

By the mid-to-late eighteenth century, all Dena'ina groups had at least some contact with Russian trappers and traders, the interior areas such as Iliamna being contacted somewhat later than those settlements closer to the coast or waterways and travel corridors (see Stanek et al. 2007). Both Tyonek and Iliamna had trading posts established by the 1790s, but Dena'ina people destroyed both of them (Townsend 1965; Hornberger 1986:4-8). A Russian trading post

Photo [illegible] Fowler, with hides and trophy antlers at Rainy Pass or Twin Lakes, circa 1927 or 1928. NPS photo H836.

was more firmly established on the Iliamna River by around 1821. This site was conveniently located on the Iliamna Bay portage route, linking Cook Inlet to interior areas. About a decade and a half later, the trading post site expanded to become Old Iliamna (Townsend 1965:57; Hornberger 1986:4-8).

Even before the arrival of Russians, the inland Dena'ina were successful long-distance travelers and savvy traders. The *qeshqa* or headmen, in particular, turned these skills to their advantage and had the keen ability to serve as effective middlemen in the fur trade, which served to strengthen their positions (Fall 1981, 1987:10; Hornberger 1986:4-9). They worked through existing trading posts at Iliamna, Tyonek, Kenai, English Bay (now Nanwalek), and Knik.

Within a hundred years of their first contact in the area, Russian trade began suffering due to steep declines in numbers of fur bearing mammals. The Russian American Company was not doing well financially and, for $7,200,000, Russia offered to sell its rights in Alaska to the United States.

> In the spring of 1867, without consulting the original occupants of the region or obtaining title through purchase or treaty, the sale was completed. The one brief reference made in the treaty to Alaska's Native people addressed neither the issue of status, rights, or land ownership. It simply stated that 'The uncivilized tribes will be subject to such laws and regulations as the United States may, from time to time, adopt in regard to aboriginal tribes in that country.' From that moment on, the threat to Alaska Native rights shifted from Russia to the United States. But it was not until the passing of the Alaska Statehood Act in 1958 that the issue was directly addressed by the U.S. Congress. This legislation, while acknowledging the right of Natives to lands they used and occupied, authorized the new state government to select for its own use 103 million acres from the Territory's public domain. With each selection by the state, more Native lands were placed in jeopardy. (Chance n.d.)

The Russian-American Company assets were purchased in 1867 by Hutchinson, Kohl and Company, and a year or two later the latter was reorganized to form the Alaska Commercial Company (Townsend 1965:62; Oswalt 1963:16, 107).

Old Iliamna remained a central trading spot for the inland region, with three stores by 1910 (Townsend 1965:167). Various stores changed hands in Tyonek, and an outlet for trade goods existed at Kijik by around 1893 (Hornberger 1986:4-12). By 1914, Old Nondalton was settled with former Kijik residents, and Hans Seversen opened his store there (Hornberger 1986:4-13; Behnke 1978; Branson 2003). Old Iliamna also served as a point for postal service for the entire Lake Iliamna and Lake Clark region from 1912-1926.

CHURCH AND SCHOOLS

By the mid- to-late 1800s, Russian Orthodox priests also visited the Lake Clark and Mulchatna areas more regularly for baptisms, marriages and religious services (Hornberger 1986:4-9). A century of interaction with Russians, Americans and others meant that not only Dena'ina religion and spirituality, but social organization as well became radically altered. The band structure, seasonal rounds, internal social hierarchies such as the one centered on the *qeshqa*, and gender roles were all affected by cultural exchanges (Ellanna and Balluta 1992:58; see also Fall 1987 on the Upper Cook Inlet Dena'ina). Further, their lives and health were threatened by waves of epidemic diseases to which they had no immunities.

> While industry and education changed the Dena'ina culture incrementally, rapid depopulation caused by epidemics devastated every aspect of Dena'ina life. The smallpox epidemics of the 1830s decreased the population by half (Fall 1981: 118), and the 1918 influenza epidemic reduced it again by perhaps a third. The shamans' spiritual and herbal healings methods had little effect of 'white man's' diseases. Every family lost someone to the tragic epidemics. (Boraas in Kalifornsky 1991:475)

Photo 8. School teacher Hannah Breece and residents of Nondalton at fish camp on July 4, 1911. Hannah Breece (1) is on the far left. Others from left to right are: Mary Nudlash Balluta (5), Alexie Balluta (8), Olga Nudlash Delkittie (9), Pete "Fediga" Delkittie (13), Andrew Balluta (17), Chief Zackar Evanoff (23), Marka Karshekoff (24), Gabriel Trefon (25), Mary Evanoff (26), Maxim Cusma (30), Mary Jacko Evan (37), Gillie Evanoff (38), Jacko Evan (39), Mary Ann Kitulkilgih Trefon (43), Trefon Balluta (44), Andrew Nudlash (51), Simeon Kakanton (53), Katherine Brooks, Matrona Yenlu Brooks Seversen (6), Stephen Brooks, Agafia Anderson, Mike Anderson, Pete Anderson, and some unidentified people. NPS photo H620.

Native peoples became integrated into a cash economy, and became somewhat dependent on the company stores, often building debts. In addition to a new reliance on store-bought goods, and the need to trade, schools became an important factor in keeping people tied to one location for longer periods of the year.

Under the Organic Act of 1884, Alaskan Native children were incorporated into a comprehensive education plan that did not officially distinguish them from non-Native children. In 1905, The Nelson Act officially stipulated an educational program specifically for Native children. In reality, Native and non-Native education had been segregated all along.

Dr. Sheldon Jackson, a former superintendent of Presbyterian missions in Alaska, was selected to direct the inclusive education plan.

> [Jackson] supported or established numerous schools in remote Native villages all over Alaska. In time these schools, and the federal teachers staffing them, became the focal points of reindeer herding, health care, and a host of other human service programs under the management of the Department of the Interiors Bureau of Education and later the Bureau of Indian Affairs. (Case and Voluck 2002:9)
>
> On March 2, 1903, Congress passed an act authorizing that payment of 50 percent of the license fees collected from unincorporated towns in Alaska be paid into the U.S. Treasury for the use of the Secretary of the Interior in operating on schools in the unincorporated sections of the territory. The income from this source enabled the Secretary to authorize in 1905 the erection of 26 school buildings throughout Alaska. One of the 26 buildings was to be built at Old Iliamna. (Unrau 1994:317-318)

Under the direction of H.O. Schaleben, a school at Old Iliamna was completed in the summer of 1908.[17] The school's total enrollment during the 1908-09 academic year was twenty-seven students. The average daily attendance was less than half of that (Unrau 1994:318). In addition to running the school, Schaleben, a medical doctor, also administered medical services to people in Old Iliamna, as well as to the neighboring communities of Newhalen and Nondalton.

Hannah Breece took over responsibility for the Iliamna school for the following academic year. Breece took on her task with vigor. Like Schaleben and his wife before her, Breece saw her task as schoolmistress as ranging far beyond the classroom. She also gave instruction in sanitation, guided sewing projects, administered medicine, and took steps to counter locally brewed alcohol (Unrau 1994:320; Jacobs 1995:92-118). She provided meals for the children, which included cooking classes for them and their mothers (Unrau 1994:324). She also traveled to Nondalton to teach children at fish camp where their families had relocated for the summer.

Breece's accounts of her daily efforts in these villages give a sense of some of the tensions between the imposed structures of external administrators and the traditional lifeways of Dena'ina peoples. Despite her sympathy for the Dena'inas' suffering through two years of famine because of poor fish runs, she retained the basic assumption that the Dena'ina needed help and "civilizing." She wrote,

> I have always been careful when working among inferior races to convey to them that I have their interests at heart and love and respect them as people, but that I do not come among them to sink to their level but to

Photo 9. Howard and Norma Bowman at Bowman's camp. NPS photo H338.

[17] Harlan Unrau offers a more extensive discussion of the early school program in the Lake Clark region in his 1994 Lake Clark National Park and Preserve Historic Resource Study. See also *A School Teacher in Old Alaska: the Story of Hannah Breece*, edited by Jane Jacobs (1995).

uplift them. If this standard is not adhered to, little can be done to improve their lives. I am superior to an uneducated Native woman and give her to understand that I realize it. She knows it herself…They are more uncivilized in many ways than I may say here. (Jacobs 1995:104)

Breece was not unique in her civilizing mission. Missionaries, teachers and other administrators shared similar perspectives. .

Complying with the coercion to attend schools meant more than agreeing to allow children to learn to read and write. It meant submitting to an entire system of thought that sought to erase language, cultural values, and fundamental world views. In this sense, patterns of seasonal mobility and wide travel over the landscape were not the only thing disrupted. Schools were a vehicle for reshaping the landscapes of the mind.

Photo 10. Bill Hill and Pete Trefon panning for gold on the Kuskokwim River Drainage circa 1935 or 1936. NPS photo H526.

Unlike the Russian-American parochial school system, which was relatively tolerant of indigenous cultural practices, the first American schools had a "forced assimilation" policy, which sought to replace traditional Native culture with its own values and language… Language extinction was an insidious part of the forced assimilation policy. (Boraas in Kalifornsky 1991:474)

Schools necessitated a shift in family subsistence practices, settlement patterns, and the yearly cycle. Educational policy dictated that children be removed from their homes. They attended village day schools or boarding schools, where they were expected to dress and behave as their non-Native teachers told them. Most significant, they were required to speak English, and were often punished for speaking their Native languages (Norris 2002:3-4).

Along with schools, religious conversion and the presence of Russian Orthodox and other Christian churches in villages also contributed to the centralization and sedentization of Dena'ina and other Alaska Natives all over Alaska. Religion and spirituality are discussed further in Chapter 6, below.

MINING AND PROSPECTING

By 1880, not only trappers and traders, missionaries and educators, but gold, copper, and coal miners were making their way up from the lower states to Alaska to try their luck in striking it rich. Gold discoveries in southeast Alaska in the early 1880s set off a flurry of gold prospecting in numerous areas in southeast Alaska, in the Yukon River drainage, later in the Klondike river valley, on the Seward Peninsula, and later near Fairbanks. Frank Norris notes that "...everywhere the prospectors ventured, they impacted the local Native populations: by hunting, by tree cutting, and by providing Natives with wage-based jobs in mines or in wood camps" (Norris 2002:3).

The quest for gold brought non-Natives into further reaches of interior areas, and in greater numbers, than the fur trade. By the mid-1890s, prospectors were beginning to move into the Iliamna region. Some also entered from the Bristol Bay area to travel to the Lake Clark and Stony River regions (Ellanna and Balluta 1992: 233). The earliest claims in the area were at Kasna Creek in 1909. Claims were filed on Lake Clark in 1911 at Portage Creek (Ellanna and Balluta 1992:233), as well as along the Mulchatna River and in the Bonanza Hills region (Unrau 1994:336). Mining efforts continued in the Lake Clark region into the 1930s.

Some Dena'ina people from the Nondalton area were hired to assist prospectors in packing supplies across the Iliamna Portage, and as guides and packers into the Mulchatna region. This provided an income at a time when fur prices were dropping and salmon runs in Bristol Bay were declining significantly as a result of overfishing by the commercial fishing industry (Unrau 1994:336). Various reports by Russian Orthodox priests noted some of the effects of the prospectors on the local environments, and on Dena'ina people, such as a number of forest fires caused by the prospectors, and reduction in available game (Hornberger 1986:4-15). Many prospectors came and went, few of them making any money. But a handful stayed on in the Lake Clark and Lake Iliamna area, making it their home for many years. Sara Hornberger offers a detailed description of these individuals in her "Overview of Historic Contact in the Lake Clark Study Area" (1986:4-1 to 4-65; see also Branson 2003). John Branson has also documented the lives of many of the early residents of the Port Alsworth area (1998).

COMMERCIAL FISHING

Simultaneous to minerals interests in Alaska's interior lands was an intensified harvest of the fish in its waters. In the 1880s, salteries were developed to pack and ship salmon out of the area. Canneries, moving up the coast from California, Oregon and Washington, provided more opportunity for economic development, but took over many key salmon fishing areas used by Native peoples. In 1883 the first cannery was established in Bristol Bay, and "...by the mid-1890s more than 50 canneries dotted the coast between Southeastern Alaska and Bristol Bay" (Norris 2002:2-3). By 1900 a handful of these canneries were sprinkled around Cook Inlet at Kenai, Tyonek, and Kasilof (Townsend 1974:23). Twenty years later, there were twenty-five canneries in Bristol Bay alone, and floating canneries followed soon thereafter (Hornberger 1986:4-27). The canneries initially employed primarily American and Chinese workers.

The early technique for commercial fishing was to set traps across the opening of a river, catching huge numbers of salmon. This meant a high level of waste, as processors often could not keep up with the catch. It also meant an immediate reduction in fish available to local Natives who lived upriver, and an overall reduction of returning salmon from season to season. John Bortnovsky, a Russian priest in Kenai, observed as early as 1897:

> ...the quantity of fish grows smaller each year. And no wonder: each cannery annually ships out 30,000 to 40,000 cases of fish. During the summer all the fishing grounds are jammed with American fishermen and, of course, the poor Indian is forced to keep away in order to avoid unpleasant meetings with these representatives of the American Civilization. (quoted in Townsend 1974:23)

And Townsend wrote:

> [Charles] Elliott (1900) noted that traps were used in Bristol Bay and there was a considerable waste of great numbers of fish. If the companies were exploiting the mouth of the Kvichak as they were the mouth of the Nushagak River, then the escapement into Iliamna Lake would have been considerably reduced. (Townsend 1965:65).

In 1907, a federal law prohibited fish traps across river mouths. Drift nets and set nets were the technologies to follow, and are the primary gear used for commercial fishing today. Local Dena'ina people from the Iliamna area began working in the canneries around 1915, according to Townsend (1965:206).

The low runs of salmon, compounded by an influenza epidemic of 1918-1919, caused massive illness and death in the Lake Clark-Iliamna region. Unrau notes that, as a result of low fish runs, some of the Dena'ina living in the Lake Clark and Sixmile Lake area returned to the Stony River and Telaquana areas to put up salmon (Unrau 1994:336). This must have taken extraordinary effort given the sweeping illness which affected virtually every family.

Low fish numbers continued on through the 1920s. In 1925 the fish numbers were so low that Dena'ina could not adequately feed their dogs as well as themselves, and had to kill many of their sled dogs. Subsistence fishing at regular fish camps was not pursued as earnestly, and the Inland Dena'ina began participating in the commercial fishery at Bristol Bay in the 1920s and 1930s (Unrau 1994:336; Ellanna and Balluta 1992).

For the Nondalton area, Ellanna and Balluta wrote:

> By the 1930s, inland Dena'ina men were hired by the canneries to fish from company owned boats and with company owned gear. Some of the Nondalton elders fondly remembered the days of fishing on cannery sailing craft prior to the use of diesel powered boats. Non-fishing employment involved the processing of fish. Fish processing was not the preferred activity of men, since it was perceived to be women's work. Once inland Dena'ina men were able to fish for the canneries, there was even more impetus for them to go to Bristol Bay during the summer. (Ellanna and Balluta 1992:76)

Foreign workers were restricted from the canneries during World War II, and this opened up cannery work to Dena'ina women (Ellanna and Balluta 1992:76-77). In the period up to mid-twentieth century, fishermen used thirty foot long sail boats for fishing in Bristol Bay's rough waters. In the 1950s, the boats began to be rigged with gas engines (Townsend 1965:206).

Alaska Statehood Act

As a compact with the United States, said State and its people do agree and declare that they forever disclaim all right and title to any lands or other property not granted or confirmed to the state or the political subdivisions by or under the authority of this Act, the right or title to which is held by the United States or is subject to disposition by the United States, and to any lands or other property (including fishing rights), the right or title to which may be held by Indians, Eskimos, or Aleuts…or is held by the United States in trust for said Natives, shall be and remain under the absolute jurisdiction and control of the United States until disposed of under its authority, except to such extent as the Congress had prescribed or may hereafter prescribe, and except when held by individual Natives in fee without restrictions or alienation (Public Law 85-508, July 7, 1958).

EVOLVING GOVERNMENT-TO-GOVERNMENT RELATIONSHIPS

After America's purchase of Alaska in 1867, Alaska Natives' land rights were not initially an issue for the federal government (Norris 2002:2; Case and Voluck 2002:6-7). In the early years, land rights for Alaska Natives were limited to the land they lived on, and did not include the extensive areas they used for subsistence purposes. In a number of rulings, it was clear that Native lands in Alaska were not considered "Indian country," and were not afforded the same protection as in the lower states. It was not until 1936 that Congress applied the Indian Reorganization Act to Alaska, which meant that Alaska Natives were legally regarded in the same way as Native Americans.

The relationship between the United States Federal Government and Alaska Natives has undergone many changes over the past century or more (Case and Voluck 2002). The legal relationships between Alaska Natives and the Federal Government have been situated against a backdrop of federal policies with Native peoples on the lower American continent. The establishment of the Department of Interior in 1849 included the Office of Indian Affairs. The relationship between federal and Native governments was not one founded on an understanding of equality: "[T]he ascendancy of federal power over Native American communities creates an unequal political relationship upon which the Native Americans are compelled to rely" (Case and Voluck 2002:3). And, despite complexity and lack of clarity in the exact terms of the relationship,

> ...Natives are compelled to depend on federal plenary power. They are dependent on the federal government to protect their aboriginal lands and give fair satisfaction to legitimate Native land claims; they depend on the government to provide important human services when the states refuse or are unable to; and they are dependent on the government to protect subsistence resources and tribal government from state or non-Native encroachment. (Case and Voluck 2002:4)

In order to further define this relationship, and to address specific issues that have emerged over the decades, a number of statutes affecting Native-Federal relationships have been passed. These include: the 1968 Indian Civil Rights Act; the 1971 Alaska Native Claims Settlement Act (ANCSA); the 1972 Marine Mammal Protection Act; the 1973 Endangered Species Act; the 1974 Indian Financing Act; the 1975 Indian Self-determination and Education Assistance Act; the 1976 Indian Health Care Improvement Act; the 1978 Indian Child Welfare Act; the 1980 Alaska National Interest Lands Conservation Act (ANILCA); and the 1982 Indian Tribal Government Tax Status Act (Case and Voluck 2002:4-5). Of these, perhaps those of most pressing and challenging significance were ANCSA and ANILCA.

ANCSA AND ANILCA

In the winter of 1967 oil was discovered in Prudhoe Bay. In order to extract and transport the oil, a vast pipeline across Native lands was planned. The oil industry's urgency to move ahead with this system drove an effort to settle land claims. That same year, in a climate of protest and resistance throughout the United States on issues of women's rights, civil rights, and anti-war sentiments, the Alaska Federation of Natives (AFN) was formed. The AFN, joining together Alaskan Native voices in a way never before imagined, between groups that historically may have had conflicts with one another, became a central means of organizing diverse Native communities from all over the state. Since its inception, the annual AFN meeting has provided a forum for Alaska Natives to discuss issues of common interest and vote on recommendations and motions. Initially formed to address land claims, the organization now addresses a range of social and political issues for some 110,000 Alaska Natives throughout the state (http://www.nativefederation.org).

The settlement known as the Alaska Native Claims Settlement Act (ANCSA, PL 92-203) passed in December of 1971. Alaska Natives were to receive approximately 18 million hectares of land (44.5 million acres), and 962.5 million dollars. The structure for the dispersal of land and money, however, was linked to a new system of corporations developed at

the village and the regional level. Twelve for-profit Native corporations were established for 12 regions of the state. A thirteenth regional corporation was later added for the benefit of Alaska Natives living outside Alaska. Each originally qualified member of a regional corporation was given 100 shares of stock. The profit-making Native Corporations make investments on behalf of their stockholders and have numerous subsidiary companies (Eileen DeVinney in NPS 2007).

Additionally, village corporations were formed at the community level. The idea was that Native Alaskans could maintain control of their economic resources, join the rest of the investing corporate world, and exercise autonomy in the management of their resources. The land was transferred into fee simple title. Undeveloped lands were to go untaxed, and shareholders could not sell their stock, for the first twenty years, until 1991.

The transfer of land to the Native Corporations was a process full of delays.

> Determining which land was available for selection proved difficult. Litigation over definitions also took up time. The vagueness of such phrases as "foreseeable community needs" in section 14(c)(3) fueled antagonisms between village corporations and city governments. Finally, the administrative cost of surveying the land—a job with which the U.S. Bureau of Land Management was charged—was large, particularly in comparison to the agency's budgets. It appeared that most of the land that Native corporations had selected would not be transferred by the time the tax exemption ended. (Flanders 1989:318)

Critics of ANCSA have charged that a corporate model was not appropriate to rural Alaska, and that there was no core industry around which they could grow. Indeed, some corporations have suffered great loss and bankruptcies. Others have managed to do very well, investing broadly all over the United States.

> Managing the land to ensure the continuance of subsistence was and is an important goal of Native leaders. ANCSA, with its granting of fee simple title, the lack of protection from legal action, and the threat of taxation in 1991 caused great concern. (Flanders 1989:318)

After many years of struggle and debate, the Alaska National Interest Lands Conservation Act was passed in December of 1980 after Reagan had won the presidential election. President Carter and ANILCA supporters completed the legislation, even though it was less than perfect, because they knew they were out of time; President Reagan would never support it. As a last-minute compromise, Title VIII of ANILCA, now practically synonymous with "subsistence," provided for the protection of subsistence activities of all rural Alaskans, rather than only Alaska Natives. Villages in or near National Park and Preserve lands, with traditional associations to those lands, were designated Resident Zone Communities.

> ANILCA set aside 104.3 million acres, and out of this reservation designated twenty-five new wild and scenic rivers [sic]; established twelve new national parks, monuments and preserves, eleven new national wildlife refuges, the Steese National Conservation area, and the White Mountains National Recreation Area (both Bureau of Land Management units); added 12.3 million acres to existing national parks, forests, and wildlife refuges; and, in perhaps the most dramatic stipulation of all, designated more than 56 million acres of the 104.3 as wilderness. (Watkins 1990:29)

A number of national parks and preserves in Alaska, including Lake Clark National Park and Preserve, were created as a direct result of the Alaska National Interest Lands Conservation Act (ANILCA, PL 96-487). The amount of land set aside for the National Park Service, more than doubling the overall acreage administered by the NPS, reflects something of the scale of Alaska's lands.

CHAPTER FOUR

Village Profiles

The series of events that swept through the coastal and inland region west of Cook Inlet—an influx of foreigners, introduction of a cash economy, large-scale extraction of natural resources, and missionary and educational efforts—affected each Dena'ina community uniquely, and profoundly. The following descriptions of each village area offer relatively brief sketches of the history and features of that community. The complex story of any one village or settlement

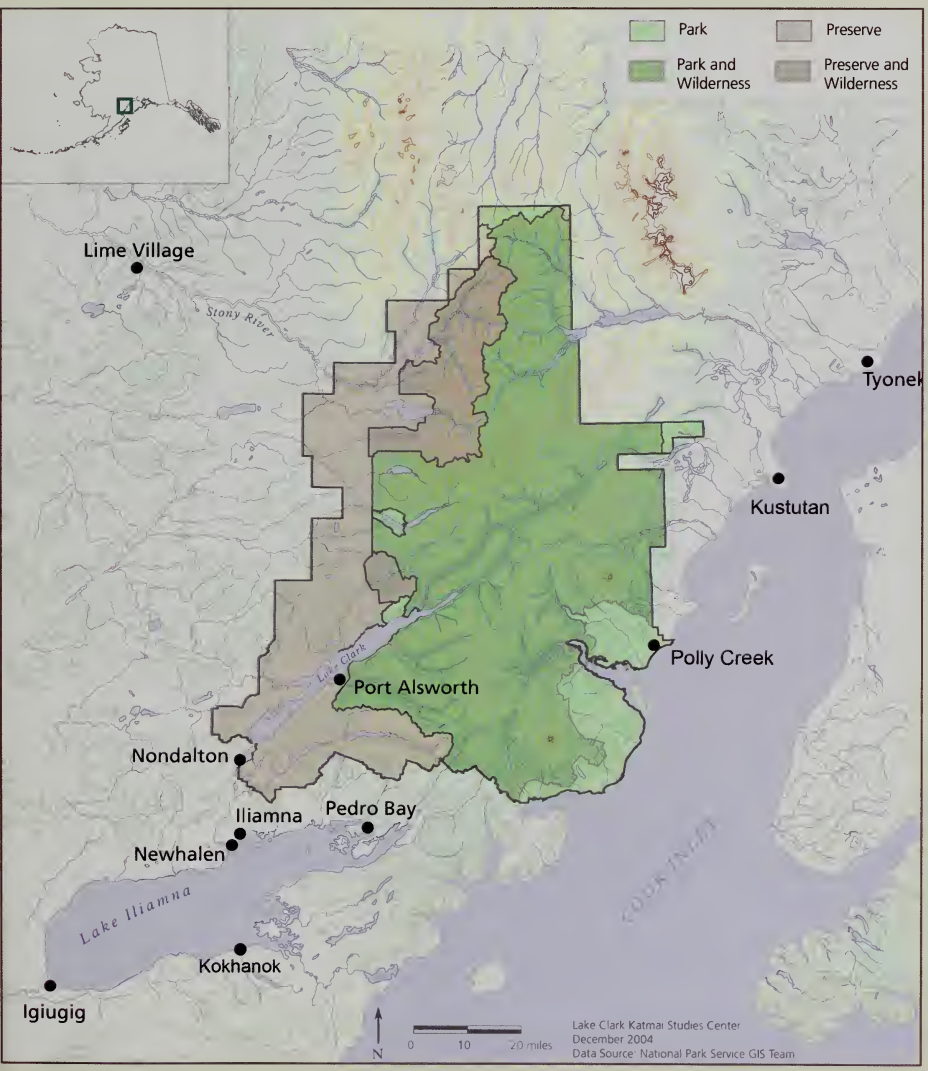


Figure 7. Map of villages, created by Barbara Bundy

area could take up many additional volumes. And, in fact, there are some wonderful resources on each of these areas, referenced throughout the chapter, which the interested reader is encouraged to consult.

In addition to the sketches or profiles offered here, a companion Community Contacts Guide offers more detailed information on contemporary community organizations such as tribal governments, village and regional corporations, non-profit organizations, as well as maps showing village layout and orientation on the landscape. This is updated annually and is available through Lake Clark National Park and Preserve.

The residents of a village may be affiliated with a federally recognized tribe, with a village corporation, and/or with a regional corporation. Federal or state agencies might consult on a "government-to-government" level with any of these entities (see the American Indian Resource Directory, http://www.indians.org/resource).

Along with the for-profit Village and Regional Corporations formed with the passing of ANCSA, non-profit Regional Corporations--often called Associations--were established to serve educational, social and cultural needs in Native villages. The non-profit Native corporations serve most of the villages in the Lake Clark area is the Bristol Bay Native Association. Lime Village and Stony River are affiliated with the Association of Village Council Presidents, which serves Kuskokwim River communities. Tyonek, located a short plane flight across Cook Inlet from Anchorage, is part of the Cook Inlet Tribal Council. The relationship between for-profit and non-profit regional entities varies by community (NPS 2007).

Other entities and organizations of relevance on the village level are the borough and the school district to which the village belongs, and the village or city entity itself. Because of these many levels, various village members often wear multiple hats as they serve as administrators for tribal, corporation, village, school district, borough or other entities.

DENA'INA IN THE LAKE CLARK TRIANGLE

Dena'ina settlements throughout this mountainous region typically cluster on the edges of rivers, lakes and ocean shorelines in order to take advantage of both fish and land wildlife, to ensure sources of drinking water, and to use waterways for boat or, when frozen, sled transportation.[18] The settlements that have some long-term relationship with the Lake Clark area might be clustered into three large groupings: the West Cook Inlet coastal area, the northwest Stony River and Mulchatna River areas, and the southwest cluster of settlements around Lake Clark, Sixmile Lake, and Iliamna Lake.

The first cluster includes villages, fish camps, hunting and fishing cabins, and other use sites along the West Cook Inlet coast. This region may be demarcated by the Beluga River on the north,[19] and includes the long shoreline, river outlets and bays that spread down to Chinitna Bay on the south side of the park boundary. The contemporary village of Tyonek is the most populated and significant of these settlements today. But Kustatan and Polly Creek are abandoned settlement areas with significant recent cultural history. Snug Harbor—with its cannery history—was an important hub as well (Johnson Ringsmuth 2005). Fish camps and clamming areas, while not always as permanent or visible on the landscape, mark areas of important social and economic activity. All of these coastal settlements or sites include ties to the land and rivers spreading inland above and behind the coastal areas. Rivers, networks of trails, hunting camps, berry-picking areas, and other sites of significance are found throughout the mountains, both within and outside of park boundaries.

A second cluster of settlements includes villages, camps, and hunting and fishing areas to the northwest of the park. Included are Lime Village, the village of Stony River, the former settlement area of *Qeghnilen*, and other settlements

[18] [illegible]-13-15) identifies seven subgroupings of Tanaina (Dena'ina) areas: Kachemak Bay, Kenai, Upper Inlet, Susitna, Tyonek, Iliamna and [illegible] study focuses on the latter three, including inland areas north of Lake Clark. At the time of her study in the mid-1960s, Townsend [illegible] nt and abandoned villages linked with the Tanaina (Townsend 1965: Appendix 3); also see map in Townsend 1981: 625.

[19] [illegible] s a somewhat arbitrary marker, as Tyonek people have historically hunted further north toward the Susitna River area.

along the Stony River, along the Mulchatna River, and at Telaquana Lake. The Mulchatna settlement was abandoned when the scarlet fever epidemic of the 1880s decimated community populations; Telaquana village was abandoned later, in the 1890s. Some of the remaining residents of both communities migrated to Kijik Village on Lake Clark.

A third cluster includes a group of related villages along Lake Clark, such as historic Tanalian Point, historic Kijik Village and current day Port Alsworth. The villages of Old Nondalton (abandoned) and Nondalton are situated on Sixmile Lake, and Iliamna, Old Iliamna (abandoned), Newhalen and Pedro Bay are settled along the edges of Iliamna Lake. These communities are connected to one another by language, marriages, shared if varied histories of contact, cultural devastation by epidemics, a history of multiple village relocations, and shared cultural traditions. People continue to travel back and forth by boat, snow machine, or plane throughout this area.

These three clusters of settlements are sketched primarily as an organizing tool. Travel routes, cabins, settlements, hunting areas and trails are found throughout the Lake Clark Park and Preserve area. And, while there are social links down along the coast, between people in the Stony River settlements, and throughout the Lake Clark and Iliamna villages, there are also important historical and contemporary ties across this larger triangle. The village communities throughout this area traded with one another on regular, seasonal cycles of exchange and social interaction that kept goods and news moving throughout the network (Townsend 1979:170). People sometimes found spouses in neighboring communities, and traveled back and forth for visiting, for help during certain harvest seasons, or for paid work opportunities. Criss-crossing kin ties traverse the Lake Clark Park and Preserve area like invisible lines, knitting communities together over great distances.

RESIDENT ZONE COMMUNITIES

The National Park Service identifies Resident Zone Communities around the Park and Preserve. These zones are defined as "...the area within, and the communities and areas near, a national park or monument in which persons who have customarily and traditionally engaged in subsistence uses within the national park or monument permanently reside" (Federal Register 1981:189-190, 36 CFR 36 13.42). For Lake Clark National Park and Preserve, the following six communities are officially identified as Resident Zone Communities: Iliamna, Lime Village, Newhalen, Nondalton, Pedro Bay and Port Alsworth.[20] These communities have subsistence rights within the Park and Preserve. The Community Contacts Guide notes many more communities associated with the Lake Clark area. The villages of Kakhonak and Igiugig are briefly referenced here, and Tyonek is discussed more fully, in order to recognize broader associations beyond the Resident Zone Communities.

COASTAL: TYONEK, KUSTATAN, POLLY CREEK[21]

Tyonek *(Tubughna,* "beach people")

Among the coastal settlements, Tyonek is the only one that remains a populated, viable community. Tyonek lies a half-hour's flight (45 miles) west of Anchorage and rests above a pebbly beach, surrounded by a combination of marshes, lakes, rivers, wooded areas, and eventually the dramatic slopes of Mt. Spurr and the Alaska Range. From here, people can draw resources from both the land and the sea. And, in fact, this prime coastal area has been occupied for thousands of years.

Archeologist Frederica de Laguna conducted research along the western side of Cook Inlet starting in 1930. She found evidence of human occupation at Kustatan and at Tuxedni Bay which has been identified as the Kachemak Tradition

[20] See the Community Contacts Guide for Lake Clark, Katmai and Aniakchak, available from the offices of Lake Clark National Park and Preserve (NPS 2005).

[21] An essential study for the Tyonek area is the 2007 *Lake Clark National Park and Preserve Ethnographic Overview and Assessment for the West Cook Inlet* by Ronald T. Stanek, Davin Holen, and James A. Fall of the Alaska Department of Fish and Game, Division of Subsistence.

(de Laguna 1930, 1934). People of the maritime Kachemak Tradition focused on large marine mammals and fish, waterfowl and migratory seabirds (de Laguna 1934). By about 1500 years ago, environmental changes and cultural and technological shifts meant that people moved out of the west side of the immediate inlet area. Dena'ina Athabascans moving from interior areas may have replaced Kachemak peoples during a warming trend about a thousand years ago. These people drew from river, marine and land resources, and eventually settled in village sites that include Polly Creek (*Taɬin Chiɬant*), Harriet Point (*Ts'iqezdagh*), Kustatan (*Qezdaghnenq'*), Old Tyonek (*Tubughnenq'*), North Foreland (*Qaggeyshlat*), and the mouth of the Chuiit River (*Ch'u'itnu Hdakaq'*) (Stanek et al. 2007:15-16).

Linguist James Kari identified distinct dialects of the Dena'ina language throughout the region occupied by Dena'ina people. The Dena'ina language spoken by people of the Tyonek area was characterized as "Upper Inlet Tanaina," which was distinct even from that which was spoken in Kustatan and Polly Creek just down the coast, the latter speaking the Inland Dena'ina dialect (Kari 1975:50; Fall 1987:5). Some of the linguistic influence from the Kenai side of the Inlet over to the Kustatan side may even have taken place after Russian contact, as a result of increased trade in that area. Stanek et al. summarized the Dena'ina occupation of the west Cook Inlet regions:

> The Dena'ina used all the river systems in all major bays along west Cook Inlet, such as Chinitna, Iliamna, Ursus, Redoubt, and Trading bays. Trails connecting the Cook Inlet shoreline and eastern slopes of the Chigmit Mountains with the Lake Iliamna and Lake Clark drainages supported active trade and social interactions between the Cook Inlet and Inland groups of Dena'ina. (Stanek et al. 2007:16)

Interaction with neighboring Dena'ina, and sometimes Yup'ik and Alutiiq peoples often revolved around trade, and occasionally involved conflict and war. Like other Dena'ina of the region, social relationships hinged on kinship relations. Leaders of the community were *qeshqa*, usually men, who oversaw resource distribution to others, including through the event of the potlatch (Fall 1981, 1987).

Once the fur trade was under way, Tyonek was targeted as an ideal site for a trading post, and in the early 1790s, a trading post was established. In 1797, however, the Tyonek people destroyed the post (for a more detailed description of these events, see Stanek et al. 2007; Fall 1987:17; Townsend 1965:215; Alexan 1981). Missionary efforts by representatives of the Russian Orthodox Church also began in the early 1790s (Znamenski 2003). The devastating influenza epidemic of 1918-19 left few survivors among Dena'ina peoples throughout the region. The village of Tyonek was moved to its present location atop a bluff when the old site flooded in the early 1930s.

Gold was discovered at Resurrection Creek in the 1880s, and that solidified Tyonek's position as a central point of trade and transport. Commercial salmon fishing began in Cook Inlet in the 1880s. In 1896 a saltery was established at the mouth of the Chuitna River north of Tyonek. By the early 1930s, the Tyonek people had begun participation in this fishery, and during the 1940s Tyonek families established their present-day fish camps along Beshta Bay south of the inlet. However, most Tyonek residents describe the 1930s, 1940s, and 1950s as a time of poverty and hardship, caused by poor commercial fishing, low fur prices, and generally scarce subsistence resources (Fall 1989:3; see also Fall et al. 1984:31; Braund and Behnke 1980:181, 206).

As a possible route of hope out of economically difficult times, the village of Tyonek received around $13 million for leases for oil and gas exploration in the early 1960s. Albert Kaloa, Jr., the village chief at the time, decided to apply the money toward totally rebuilding the village. Most of the buildings that make up the current village of Tyonek were built in the mid-1960s with this initial lease money. Around sixty prefabricated homes were brought over on barges and erected at the new town site. Frank Brink captured some of this period of rebuilding of Tyonek in a film called "Tubughna: The River People." Composed of footage taken over a number of years, the film documents the lives of individuals and families from the 1960s through the 1980s (Brink and Brink 1988). In 1978-79, the Department of Housing and Urban

Development along with the Cook Inlet Native Association, funded an additional twenty-seven homes in an area known as "the subdivision."

Most of the abandoned buildings of Old Tyonek still remain standing, forming an odd, contemporary sort of ghost town. Some of the homes in Old Tyonek are still occupied. A few of the structures at the old village were disassembled and taken down the beach to be reassembled at people's fish camps. Tanya Bismark, for example, enjoys an old log structure at the fish camp that was once her family's cabin in Old Tyonek. The complete rebuilding of a village, as Tyonek residents have done, is an unusual case, but it is consistent with the Dena'ina pattern of recreating settlement areas for themselves, for a variety of reasons.

A network of roads, developed in the late 1960s and early 1970s to facilitate timber and oil extraction, can carry people to the areas surrounding Tyonek: west almost to the base of Mt. Spurr, north nearly up to the Little Susitna River, and many miles down along the beach to various fish camps along Beshta Bay. The road system does not connect to any larger highway system in the state.

As with other areas in rural Alaska, Tyonek people need to use small aircraft for travel in and out of the area. Planes come and go with regular service between the village and Anchorage (or other destinations such as Kenai) at about a hundred dollars a round trip. It also means that all of the commercial goods that the community uses—from automobiles and four-wheelers to Barbie dolls and soda—must be brought over by air or water. Airplanes arrive several times a day, and most drop off requested supplies. Additionally, the waste from broken or discarded objects (again, from toy trucks to real ones), and everyday trash, goes nowhere other than to the surrounding environment, to a designated dump site about three miles south of town, or into otherwise semi-organized piles on the landscape. While some discarded items are eventually carried out, for the most part, what comes into the village stays in the village.

In the long run, the hopes for an economic boom in oil were not really met in Tyonek. While there are a number of oil wells on land surrounding the village, and another four oil rigs that dot the view off-shore, production is not so high. The last few decades have also seen lower production in the commercial fishing industry. Many people complain about the lack of employment opportunities in Tyonek today. The majority of employment comes from the tribe itself, in administrative or community outreach positions. The school employs some teachers, administrators and support staff. Other possibilities have come and gone with the booms in timber and the potential for oil. Road maintenance is a necessity, and some people occasionally get positions with the Beluga Power plant up the coast. The Tyonek Native Corporation manages a successful fishing lodge which offers guided fishing on the Chuitna River in the summer season.

Many young people leave either during or directly following high school, in order to pursue their education elsewhere. Many attend college in the lower states of the US, although some also attend the University of Alaska system. Regardless of how far their education goes, most young people, once gone, will not return to the community to live full time. Many part-time or former Tyonek residents continue to hunt, fish and gather subsistence resources from the area around the community, even though they live and work in Anchorage or elsewhere.

In 1915, the village lands around Tyonek were designated the Moquawkie Indian Reserve. After ANCSA was passed, the village corporation, Tyonek Native Corporation and Cook Inlet Region Incorporated selected Native lands around the village.

Polly Creek (*Taƚin Ch'iłtant*, "where we found the whale")
Polly Creek is a small former settlement on west Cook Inlet. Polly Creek was located at the mouth of the creek for which it is named, just northeast of Tuxedni Bay. Frederica de Laguna conducted some archeological research at Tuxedni Bay in an attempt to locate the old ruins of Polly Creek Bay, possibly linked with the Tu'ltcena clan (de Laguna 1934:137). However, none of the houses found were very old (Townsend 1965:81).

Polly Creek was an ideal site for extracting clams for commercial clamming interests. By 1920, quite a number of Natives dug clams for the Snug Harbor Canning Company (Boraas in Kalifornsky 1991). Peter Kalifornsky was a Dena'ina man who spent some years of his youth in the Polly Creek and Kustatan areas. Kalifornsky recalled:

> They set up a factory at Snug Harbor to can clams. Different people came to Polly Creek. Some came from Iliamna, others from Seldovia, Kodiak, Ninilchik, Tyonek or Kenai. There were no houses there. They all pitched tents...
>
> When the tide went out, they all went out on the flats. They gathered clams. They kept a scow anchored for them. There they bought the clams from them. They paid $1.25 for one gas box full of clams. Some people were good at clam digging. My uncle Chickalusion, with whom I stayed, was the best digger. On a good day he would gather twenty boxes.
>
> They came back ashore when the tide came in. A boat would come to the scow and take it and leave another in its place. Then the people came back ashore. They played the stick gambling game, cards, quoits, and a game where they pushed and pulled on a pole. They played different kinds of games. And they would wrestle. Some of them would hunt in the woods for black bear, porcupine, and beaver. Some would hunt beluga and seal.
>
> I would fire up the steambath for the old men. And they would all take a steambath. I put rocks on the fire for other people. When evening came, the old men would gather and tell stories. "Come," they said to me. And I would listen to them. Before the year 1921, I heard those songs and stories there. (Kalifornsky 1991:3)

Polly Creek clams are still dug and packaged for a national market.

Kustatan

Kustatan means "point of land" and, like many Dena'ina place names, it describes the unusually long extension into the inlet quite accurately (Kari and Kari 1982; Lord 1996:46; see also Alexan 1981). Kustatan was another Dena'ina village site, with residents who came from Polly Creek or other coastal areas, or from Kenai. De Laguna visited Kustatan in her 1930 field season. She reported, "In 1910 it was abandoned and some of the inhabitants went to Chief Chikalootain's [today spelled Chickalusion] place which was north of West Foreland, and others went to Kenai." An informant told her that the village was "almost destroyed by a disease sent by an unfriendly shaman at Susitna" (Townsend 1965:77).

> When they stayed at Kustatan, they made oil from beluga, seal, and other things. They went after clams. They cooked the clams. Then they put them in a beluga stomach and poured in oil to preserve it for winter. When they opened it up, they washed the clams in hot water. They cooked clam soup whenever they wanted to make it.
>
> There was no moose over there. They would go by boat to Kenai and kill moose. They dried that too, and brought it back over. It was for winter. And then, in the places where they would put up fish, they would go after ground squirrels. That, too, they cooked, and they put it away, packed in oil for the winter. (Kalifornsky 1991:213)

Peter Kalifornsky's family, as an example, illustrates the kinds of ties people had back and forth across Cook Inlet, and up and down its west coast. Peter Kalifornsky was born in Kalifornsky village north of the Kasilof River on the Kenai Peninsula. Peter's mother was sister to Theodore, Max and Simeon Chickalusion who lived in the Tyonek area. Theodore Chickalusion was the chief there in the 1910s and 1920s (Boraas in Kalifornsky 1991:471). Peter Kalifornsky spent some years of his youth in the Polly Creek and Kustatan areas, and also went back to Kalifornsky village (Boraas in Kalifornsky 1991:473-474).

Just south of Polly Creek, Chisik Island juts up out of the deep waters at the mouth of Tuxedni Bay. The harbor tucked behind Chisik is Snug Harbor, which provided a protected location for the Snug Harbor Cannery for most of the twentieth century (Johnson Ringsmuth 2005).

NORTHEAST: LIME VILLAGE AND STONY RIVER

Lime Village (*Hek'dichen Hdakaq'*, possibly "abundance month")
Stony River flows south out of the Alaska Range, wending generally westward, and growing in size until it meets the Kuskokwim River. Lime Village is located near the confluence of Hungry Creek (*Hek'dichen Vetnu*, or "abundance stream" in Dena'ina) and the larger Stony River, below the Lime Hills to the north and west. The village is approximately 185 miles west of Anchorage. While Lime Village is outside of the boundaries of Lake Clark Park National and Preserve, the Stony River, the village's key resource, winds through areas designated as the Preserve. Lime Village is a Resident Zone Community of Lake Clark National Park and Preserve. Residents of this region have historical ties to the surrounding lands and waters, and have historically traveled to the Telaquana Lake area, to areas along the Mulchatna River, to the Nondalton area and to surrounding regions as well. Before the park boundaries were even established, Steven Behnke documented the traditional territory in the Lake Clark area, and noted the land's importance for providing subsistence resources (Behnke 1978).

Some of the four bands identified in the introduction were located in the interior areas along the Stony River, the Mulchatna, and at Telaquana Lake (Kari and Kari 1982:16-17; Russell Kari 1983:6). James Kari and Priscilla Russell Kari speculated that this high plateau country, called *Htsaynen* by the Dena'ina, may have been the earliest homeland for Dena'ina of the broader region (Kari and Kari 1983). The four or more bands of this region, over the last hundred years or more, "consolidated into the Lake Clark and Stony River bands," and migrated primarily to Nondalton (Russell Kari 1983:7). The group of inland Dena'ina who live in this area are considered the Stony River Dena'ina. In 1844, the Russian explorer Zagoskin (1967:268) reported that the Stony River Dena'ina traded at posts on the Kenai Peninsula, Iliamna Lake, and at Fort Kolmakov located between what is today Ankian and the Holitna River (Oswalt1980:89; Johnson et al.1997:29).

Lime Village is the most recent manifestation of a past practice of abandoning villages, for various reasons, and reestablishing them elsewhere. *Qeghnilen* was a Dena'ina village located about twenty-three miles up the Stony River from the current-day site of Lime Village, and was a trading site for the Stony River people in the late nineteenth century. Other trading posts along the Kuskokwim River were established by Russians and Americans and were also used by the Dena'ina from the mid-nineteenth century on (Johnson et al. 1997). *Qeghnilen* was an important fish site. Because of the steepness of the terrain, people fished primarily with dip nets rather than set nets (Ellanna and Balluta 1992:25).

People moved away from *Qeghnilen* to Nondalton or Lime Village in the 1920s possibly due to "the decline of trade in the 1920s, the desire for wage employment, and the burning of the local church by a forest fire" (Johnson et al. 1997:30). By the next decade *Qeghnilen* was completely abandoned, although it is still used as a seasonal fish camp.

Oren Hudson, a pilot in the inland area for many decades, remembers flying into Lime Village in the early 1950s. He recalled that he took Ruth Bobby Koktelash, Frances Hobson Wilson, and Katherine Hobson Trefon to Lime Village to visit. He said:

> Mrs. Bobby put water in a big birchbark basket. Then, with a forked stick, she added hot rocks and some sort of herb mix. She made cups for each of them of birchbark and they had tea. (Oren Hudson 1985)

Photo 11. Lime Village, on the Stony River. Photo by Karen Gaul, September 2005.

Lime Village is still considered to be one of the most remote rural communities in the region, although it has its own airstrip and regular flights in with mail and supplies. In the early 1980s, Priscilla Russell Kari noted approximately 40 people living in Lime (1983:5). The 2000 census reported only six people living there (U.S. Census 2000). Today there are definitely more than six residents in Lime Village, but the population remains small as people leave for better employment and educational opportunities. The school in the village closed September 2007.

Stony River (*K'qizaghtetnu,* "distant stream")

Stony River Village, located to the west of Lime Village, is also a contemporary community with links to the region and to past settlements and use of the area. Stony River Village is located on an island near the north side of the Kuskokwim River, just north of its confluence with the Stony River for which it is named. The village is about 220 miles west of Anchorage. Stony River is known to some as Moose Village or Moose Creek. Priscilla Russell Kari notes that "Stony River village is the modern contact point between Yup'ik Eskimo and three distinct Athabascan languages: Kuskokwim Ingalik (more properly Deg Hit'an), Dena'ina, and Upper Kuskokwim" (Russell Kari 1985:5).

Russian explorers made their way into the central Kuskokwim area in the early 1790s (Zagoskin 1967; Russell Kari 1985:9). Residents of the area have been comprised of a mix of Native and non-Natives ever since. For many years Stony River served as a trading post and landing for supplying mining operations in the region. The first trading post opened in 1930, and a post office was established five years later.

After people eventually established year-round residencies in Stony River Village in the early 1960s, the Gusty Michael School was constructed. This school, serving children from pre-kindergarten to twelfth grade, is part of the Kuspuk School District. However, there is only one teacher, and the total number of students enrolled has averaged around 10-15 over the last several years. The year-round population of Stony River stayed around 75 during the 1960s through 1980s. The population was reported as 51 in the 1990 census, and 75 in the 2000 census (U.S. Census 2000). The Stony River community is the most distant of the villages in the area from the boundaries of Lake Clark National Park and Preserve, but residents there have ties to the people of Lime Village, and to hunting grounds in the Mulchatna and Telaquana areas.

In this northeast region, the Mulchatna and the Telaquana settlement areas are now abandoned sites. The Mulchatna River spills out of Turquoise Lake, in the mid-western region of Lake Clark Park and Preserve. The Mulchatna eventually flows into the Nushagak River as its largest tributary, to finish its spill into Bristol Bay near Dillingham. Flowing in southwesterly direction, the Mulchatna River area has been occupied by people for millennia. In recent centuries this has meant more permanent settlements, and multiple room, semi-subterranean dwellings, many of which have only been relocated by an archeological survey quite recently (Branson 2002; O'Leary 2002).

Telaquana (*Dilah Vena*) means "The salmon go up that lake" (Alec and Pete Trefon 1975). Telaquana Lake is a large and beautiful lake, wrapped by sharp peaked mountains. A settlement near the west end of the lake, *Ch'qułch'ishtnu*, came to be known as "Old Village." It was advantageously located along Trail Creek, which was rich with fish, and guarded by surrounding woods. Another village was located on the north side of Telaquana Lake. Contemporaneous with the Mulchatna villages, the Telaquana settlements could be reached from the Kijik village site at Kijik Lake via the travel corridor now known as the Telaquana Trail. The Trefons were one of the families who lived in the Old Village settlement.

Joan Townsend estimated that by around 1800, there may have been around 400 people living in the Mulchatna region (Townsend 1965), although recent archeological survey work in the area has not revealed evidence to support such high numbers (Branson, McMahan and O'Leary 2003; and personal communication with Branson and O'Leary). Townsend notes relatively high numbers of births, deaths and marriages recorded in the Alaska Russian Church Archives in the mid- and late-1800s (1965:78). The Mulchatna Dena'ina began trading Western goods during the Russian era. Russian Orthodox priests first came to Mulchatna villages in the 1840s, and by the late 19th century prospectors had arrived in the Mulchatna country (Ellanna and Balluta 1992:66; Branson 2002:23). The foreign visitors brought a series of epidemics area, with a heavy impact on indigenous Dena'ina who had neither natural immunities nor immunizations to them. The epidemics lowered the population significantly. By 1880, the early estimate of 400 people in the area had dropped to a population Petroff estimated at 180 for all of the "Mulchatna villages" in 1880 (Petroff 1884:17; Branson 2002; see also Townsend 1965:78). As a result of the scarlet fever epidemic in the 1880s, in combination with low fish numbers, the thinning number of surviving residents from the Mulchatna area relocated to Kijik village (Branson 2003:45; Unrau 1994:335-336).

The move also put people closer to trading posts in Iliamna, as well as to the St. Nicholas Russian Orthodox church in Kijik (Branson 2002:23). Commercial fishing significantly reduced numbers of fish available in the Mulchatna, so drops in basic subsistence resources were also a reason why people could no longer live in the Mulchatna villages. However, Ellanna and Balluta note that Dena'ina residents of the Lake Clark area continually pursued king and silver salmon fishing in the Nushagak/Mulchatna River systems, as these species were valued for their distinct flavor, and other uses (1992:25). Townsend observed that the people of the Nondalton and Pedro Bay areas continued to trap in the Mulchatna River area.

SOUTHWEST: KIJIK, PORT ALSWORTH, TANALIAN POINT, OLD NONDALTON AND NONDALTON, OLD ILIAMNA AND ILIAMNA, NEWHALEN, PEDRO BAY

Kijik (*Qizhjeh*, "a place where people gathered")

On the north side of Lake Clark, Kijik Mountain rises right out of the edge of the lake. Not far away, tucked up behind a smaller mountain, *Dghilishla*, is Kijik Lake. Dena'ina people once lived near and used both lakes, as well as the outlet river running down from Kijik Lake into Lake Clark. The historic village of "Old Kijik" was located on Lake Clark north of the mouth of the Kijik River.

Abundant natural resources drew people to gather at Kijik. There was access to salmon, for example, at Kijik Lake, known to the Dena'ina as *K'q'uya Vena*, red salmon lake. Many land mammals also used the area. Berries, spruce and birch were among the plants available.

The Kijik settlement area, or what is now the Kijik Archeological District, consists of a number of village clusters, fish camps, and a cemetery all situated at the southern end of the Telaquana Trail. The site represents the densest concentration of prehistoric Athabascan settlements in Alaska, including the foundations of over 300 semi-subterranean houses (Lynch 1982). Trapping and trading routes radiated out from the site. From there people traveled along the Telaquana route to Old Telaquana Village, Tyonek or other points north.

The dates of occupation in the Kijik settlements range from about 1000 AD to the early 1900s. Dena'ina people living in Kijik came from the Mulchatna and Telaquana village area and elsewhere. A Russian Orthodox Church was established there by the mid-1880s (Branson 1998:1).

Around 1900, the residents of Kijik included Mary Ann Trefon, Trefon Balluta, Gabriel Trefon, Evan Koktelash, Yvdakia Karshekoff and Chief Zackar Evanoff, among others. The Trefon Balluta family had moved there from Telaquana village (Branson 1998:1). At that time, there were at least 17 Euroamerican prospectors living in and around historic Kijik village, part of a spillover of prospectors from the Turnagain gold rush into the Iliamna-Lake Clark country. Native residents of Kijik fell victim to a measles epidemic in 1902, and while most of the survivors moved to Old Nondalton, Big Evan Nudlash continued to live at Kijik. His was the last Dena'ina family to live there (Branson 2003:45-46). Kijik village was abandoned by 1909, except for use for fall fishing. Dena'ina people continued to live seasonally at Miller Creek, just to the northeast of Kijik as well.

Port Alsworth and Tanalian Point (*Tanilen*, "current flows into water")

Port Alsworth is on the east shore of Lake Clark at *Hardenburg* Bay. It is surrounded by Lake Clark National Park and Preserve, and the park field headquarters are located nearby. The Port Alsworth area has a unique history of Dena'ina, Euroamericans, and others settling in the area, and combining their families to form a community.

Down the Lake from Port Alsworth lies the historic village site of Tanalian Point, near the opening of the Tanalian River or *Tanilen Vetnu*.[22] The Trefon Balluta family was the first Dena'ina family to relocate from Kijik in 1911. Doc Dutton and Joe Kackley were the first gold prospectors to settle on the point, and a few more Dena'ina families moved there as well. Charlie Dennison eventually set up a steam powered sawmill in the winter of 1934-35, which provided most of the lumber for the construction in Old Nondalton (Johnson et al. 1997:39).

In 1944 Leon "Babe" Alsworth and his wife, Mary moved to Hardenburg Bay. Mary was from Pilot Point, and was of Scottish and "Aleut" descent. Just a few years later, they moved to the current Port Alsworth site, which was more appropriate for the safe landing of aircraft. The first post office was established in the Alsworth home in 1950. Their family established an air service, Lake Clark Air, and their son Glen later added a lodge called "The Farm" in the late

[22] For a brief summary of the history of Tanalian Point, see the Tanalian Point poster constructed by John Branson and Barbara Bundy, NPS, 2006.

1970s. The Alsworths had a very large and productive garden to supply them with produce throughout the year. This was true of Doc Dutton and Joe Kackley as well. John Branson notes that mutual sharing of knowledge and technologies took place between the Dena'ina and Euroamericans who settled in the area. Doc Dutton and Joe Kackley, for example, learned to smoke salmon from their Dena'ina neighbors. They also "incorporated much Dena'ina woodcraft and knowledge of various trails." In turn, they grew flourishing gardens, and as Branson says, shared their knowledge of vegetable gardening as "instructors by example" (Branson 1998:27).

Photo 12. Katie Trefon and Pete Trefon playing accordion and guitar at Tanalian Point, circa 1930s. NPS photo H517.

Once the Alsworths moved to Hardenburg Bay, full-time residents slowly moved away from Tanalian Point. Others, like Trefon Balluta, Agafia Trefon, Joe Kackley and Doc Dutton, lived there until they passed away. The combination of Native and non-Native residents was repeated in Port Alsworth. In a unique ruling, Babe and Mary Alsworth and their children were recognized as the Tanalian Village Corporation under the provisions of ANCSA. They own close to two thousand acres of land around the Port Alsworth area (Johnson et al. 1997:39; Ellanna and Balluta 1992:312).

The Alsworths and many other residents of Port Alsworth are members of a religious organization called Arctic Mission, Inc. (AMI). They run Bible camps in the summer and have links to church networks throughout the rest of the United States, with missionary interests in Russia, Africa and elsewhere. The presence of the church and related activities is a strong force in the community.

Besides the Alsworths' Lake Clark Air service, there are other air services such as Lake and Peninsula Air that fly regularly into Port Alsworth, and the hunting, fishing and tourism industry keeps the village quite active in the summer months. Several lodges and a camping area are located nearby. Lake Clark National Park and Preserve has an office and a small visitor center in Port Alsworth. The community is part of the Lake and Peninsula Borough.

Old Nondalton and Nondalton (*Nundaltin, Nuvendaltin,* "lake extends below")

The genealogy of the settlements of the Mulchatna River area, Old Kijik and a later Kijik (*Qizhjeh*), Old Nondalton and the modern Nondalton are all entwined together. Many Nondalton people trace their ancestry to the Mulchatna River Dena'ina villages, as noted above. Some came via Kijik. A measles epidemic caused Dena'ina people to move from Kijik and Old Iliamna to Old Nondalton on Sixmile Lake over a period of time between 1900 and 1910 (Townsend 1965:79). Sixmile Lake lies up against Lake Clark. Pete Trefon (1985) told an interviewer that the correct pronunciation of Nondalton was *Nuvendaltin*, which means "small lake lay up against big lake." As mentioned above, some people also moved from Kijik to Tanalian Point starting in 1911.

The settlement which was later known as "Old Nondalton" was located several miles north of the current location of Nondalton. A post office was established in Old Nondalton in 1938. Non-Native operated schools were built, one in Old Nondalton in the late 1920s and one in Nondalton in the 1940s (Johnson et al. 1997:35). In 1940, after the community had existed for about four decades, the fuel wood supply ran short and the expanding mud flats made lake access difficult. Albert Wassillie explained why people moved from Old Nondalton to its new location: "...[T]hat village—the water would come up to the bank—but later on, I don't know how many years, the whole front of the lake became a flat" (Albert Wassillie 1985).

One of the families living at Old Nondalton, beginning somewhere around 1910, was Hans Seversen and his Dena'ina wife Yenlu. Hans was originally from Minnesota, and had been in Alaska a number of years before marrying Yenlu, the young widow of Charles T. Brooks.

> ...Seversen ran a small store at Old Nondalton stocking staples like tea, sugar, rice and flour. Then during the winter of 1925-26, Yenlu and her children joined Hans at the roadhouse at present-day Iliamna. (Branson 2003:47)

What became the new Nondalton—now simply referred to as Nondalton—is located on the west shore of Sixmile Lake, fifteen miles north of Iliamna. The village post office was moved to the new location. A new school was built in Nondalton in 1972. The census for 2000 reports 221 residents (U.S. Census 2000).

New transportation technologies brought change to Nondalton as well as to other rural communities. In the 1920s, [illegible] began to replace hand-crafted boats. The first airplanes began flying into Nondalton in the 1940s,

Photo 13. Alexan, Edith and Nikolai Balluta in 1932 at Old Nondalton. NPS photo H45.

introducing a mode of access to goods and services that would only increase over the decades (see inset in Chapter 5). Snow machines introduced in the early 1960s, fairly quickly replaced the dog teams that people had previously kept for pulling winter sleds and assisting in hunting and travel. Once the dog teams phased out, the amount of fish that people needed to catch and store up for the winter was greatly reduced. Motorized three- or four-wheel vehicles, known alternately as all-terrain vehicles (ATVs), off-road vehicles (ORVs), or simply as "Hondas", were used in villages by the 1980s. Additionally, a number of trucks have made their way into the community and are used on local roads. These motorized forms of transportation mean a reliance on fuel and service needs, which can be costly. They can also be a source of injury and accident. Nevertheless, these vehicles have made hunting and travel between villages much easier than in the past.

Employment opportunities for Nondalton residents include commercial fishing in Bristol Bay, a few government positions in fire fighting, jobs with the National Park Service, and some positions in the school, health care, and other community services.

Nondalton formed an incorporated city government in 1971, with a city council and a mayor. The Nondalton Tribal Council is made up of seven elected members and an appointed Tribal Administrator (Johnson et al. 1997:37). Nondalton

is in the Bristol Bay Native Corporation. Kijik Corporation is the community's for-profit corporation, and most Nondalton residents are shareholders. Native allotments for Nondalton residents include 8,995 acres, much of this is on the shores of Lake Clark, especially the southern half of the lake. Nondalton's total land entitlement through ANCSA is 126,410 acres.

Nondalton has been a strong community since its inception at the beginning of the last century, although it is not without its economic and social challenges. One problem is that it is very expensive to purchase food and supplies in Nondalton. While residents still rely highly on subsistence resources, moose numbers have been down in the area in recent years. Some Nondalton residents attribute this to the high amount of sports hunting that goes on in the region. Residents of the community are critical of subsistence management, and what they perceive to be a privileging of sports hunting over subsistence hunting despite the legal determination that subsistence needs take precedence (Nondalton Group Interview 2004).

Large amounts of ethnographic data have been recorded for the Nondalton community. A very rich resource is *Nuvendaltin Quht'ana: The People of Nondalton*, an ethnographic study of the village and surrounding area by anthropologist Linda Ellanna and then Nondalton resident Andrew Balluta. More recently, an interdisciplinary team of researchers conducted a study of Nondalton residents' traditional ecological knowledge of non-salmon freshwater fish (Stickman et al. 2003). The Alaska Department of Fish and Game Division of Subsistence has conducted periodic household harvest surveys in the village, including one completed in Spring 2005 in conjunction with the proposed Northern Dynasty Mine (Fall et al. 2006).

Old Iliamna (*Nuch'ak'dalitnu* "flows out river" *or Ch'ak'dalitnu*) and Iliamna

The Iliamna Lake area has long served as an intersection or crossroads for trade and travel (see Branson 2003). Iliamna Lake is over 75 miles long, and situated at the upper end of the Aleutian arm. It drains out its west side via the Kvichak River. A twelve-mile portage to Cook Inlet (via the Old Iliamna site) on the east, along with the Kvichak river route to the west, provided something of a bridge for early travelers to cross southern Alaska. Iliamna Lake also offers links to Lake Clark and the country to the north.

Iliamna Lake is home to many species of fish, including arctic grayling, Dolly Varden, rainbow trout, lake trout, sockeye salmon, coho salmon, chinook salmon, and northern pike. Dena'ina and Yup'ik people have long settled along its shoreline, traveling up and down its tributaries to the most productive fish sites. The lake is also one of the few freshwater lakes to support a seal population, which local people hunt (Townsend 1970:5). Because of its relatively easy access to the coast, residents of the Iliamna Lake area had some access to sea mammals and clams.

Archeological work in Pedro Bay reveals evidence of a Dena'ina settlement dating from around 1700-1750 (Townsend and Townsend 1961). People may have slowly moved from the Pedro Bay site to Old Iliamna over the course of time (Townsend 1965:61). Townsend suggested that the Dena'ina must have been well established in the area by the time the first Russians arrived in the late 1770s. She notes that finding archeological sites in the dense forest and underbrush is very difficult, and determining whether a site was "Indian" (Dena'ina) or "Eskimo" (Yup'ik) is also very difficult (Townsend 1970:5-6), partly because of the cultural exchanges between the groups. Glass beads and pieces of metal had been introduced as trade items even before the arrival of the Russians.

The Dena'ina of this area traded with Koniag of Kodiak Island, Ahtna of the Copper River area, the Kuskowagamiut and Deg Hit'an from Southwest and Interior Alaska, Tanana from the Interior, and Tlingit from Southeast Alaska (Townsend 1970:7). In the late eighteenth century, Russian trappers and traders met with a series of violent clashes with the Dena'ina people around the Lake Iliamna area. By 1821, relations had calmed, and by 1826 a Russian trading post was established most likely at Old Iliamna on the east side of the lake. Increased missionary activity following the smallpox epidemic of 1836-1840 brought more priests to village areas. Iliamna names appear in church records even though priests were relatively infrequent in those early years (Townsend 1965:57-58).

Old Iliamna was located on the Iliamna River, near its opening into Pile Bay on Iliamna Lake. Situated at the end of the portage from Cook Inlet, the village was an important crossroads in the late nineteenth and early twentieth century. A post office was established in 1901. Hadley Redmyer, a reindeer herder, was a teacher in Old Iliamna starting in 1905, although the school in Old Iliamna didn't open until 1908. The school closed in 1926.

People moved out of Old Iliamna into Pedro Bay and Pile Bay Village in the early decades of the twentieth century. Part of their reason for relocating was that the river's siltation affected their ability to fish (Townsend 1965:68; see also Johnson 2004). A measles epidemic in 1900 and an influenza epidemic around 1918 were further reasons for relocation and abandonment of some villages (Morris 1986:24). Continued missionary activities and formalized education were additional contributors to relocation of people. A new school was built in 1952 at Pile Bay, but some children were still sent out to boarding schools.

New Iliamna, simply referred to as Iliamna, is located just north of the mouth of the Newhalen River, south of Sixmile Lake and Lake Clark. It is due west across the northern portion of the lake from Old Iliamna. Stores at Iliamna, owned by a series of companies, provided provisions for trappers and eventually prospectors, as well as for the Dena'ina people throughout the area. A roadhouse was built in 1913, and Hans Seversen gradually took control of this in the 1920s. Iliamna grew up around the Roadhouse and it remained an important site of trade into the 1940s (Branson 2003). A military airstrip was built between 1941 and 1943, and this drew more residents.

Photo 14. Old Iliamna school children. Circa 1911-1913. NPS photo H561.

As was true in other areas, a few Euroamerican men settled in the Iliamna area, married local women, and had children. In the mid-twentieth century, a number of missionaries, including members of the Arctic Missions organization, moved into the area (see Mattson 1999). Townsend noted that this influx "has not been entirely welcome" among the Dena'ina, and that some divisions within the community resulted (Townsend 1965:68; Morris 1986:24).

Like other villages in this area, the advent of commercial fishing in Bristol Bay brought an economic reconfiguring of the local economy. People from the Iliamna region did not start working in the canneries until around 1915, and only later, around the time of World War II, did Dena'ina men begin working on the fish boats. By then, air travel was becoming commonplace throughout the region, and travel to fishing areas became much faster (Morris 1986:23). Judith Morris noted that the shifting history of Iliamna is reflected in its structures:

> Transportation services, lodge facilities, commercial enterprises, government agencies, a church, and private homes were intermixed throughout the community. A combination of transient workers, non-Native and Native permanent residents, and seasonal residents resided in Iliamna. (Morris 1986:36)

Iliamna is a transportation hub for the Lake Iliamna Region. The airstrip at Iliamna is sizeable (8,000 feet), is paved, and larger airplanes can land there. Float planes coming from Iliamna can land at many of the nearby lakes, or on private airstrips in the area.

Iliamna is a now a locus of guided fishing, sightseeing, and other tourism opportunities. Many of the lodge owners and employees, however, reside in other parts of Alaska, or in the lower United States, so contributions to the local economy are limited. These enterprises, along with continued commercial fishing in Bristol Bay, provide sources of income for the community. Many residents continue to participate in subsistence hunting and fishing activities. Iliamna is also a launching point for many of the activities at the test drilling sites for the proposed Northern Dynasty Pebble Mine.

The tribal entity of Iliamna is administered by the Iliamna Village Council. The Alaska Native Claims Settlement Act entitled Iliamna Natives, Ltd., the village corporation, to 71,530 acres of land. The regional for-profit corporation is Bristol Bay Native Corporation, and the regional non-profit organization is Bristol Bay Native Association.

Newhalen (*Nughil Hdakaq'*, "water running down")

Newhalen is located on the north shore of Iliamna Lake at the mouth of Newhalen River, approximately five miles south of Iliamna. Petroff's 1890 census noted sixteen residents in the "Eskimo" village of "*Noghelingamiut*," a Yup'ik name meaning "people of *Nughil Hdakaq'*." Newhalen is an anglicized version of *Nughil Hdakaq'*. The location of this village has apparently changed over time as well from different sites along the Newhalen River (Morris 1986:42). Unlike many of the other village settlements around Lake Clark and Lake Iliamna, Newhalen is largely a settlement of Yup'ik speaking people (historically referred to as Pacific Eskimos), and has been since the late 1800s. This area marks what some researchers identify as a cultural boundary between the Dena'ina and Yup'ik peoples, and some conflict and battles between the two ethnic groups are conveyed in oral histories (Tenenbaum 1984:232-260). Newhalen is said to be the home village of a famous Dena'ina warrior *Ts'enlghulyał* (Kari and Balluta 2005). The oral accounts indicate that the Newhalen area was formerly a Dena'ina settlement, with Yup'ik people moving to the area in about 1900.

Both subsistence and commercial fishing are still important at Newhalen. Commercial fishing is one of the few sources of income in the area, with some residents holding commercial permits for Bristol Bay fisheries, and others working as crew for other operators. What employment is to be found in the area is mostly seasonal. Some residents find work in the tourism industry, as several thousand sport fishermen visit the area each summer particularly for rainbow trout fishing. Subsistence resources still provide a substantial part of the annual diet (Fall et al. 2006; Morris 1986). People also work in canneries for cash income, and some work in the school. Otherwise, however, jobs are few and the cost of living, including heating oil, groceries and other store-bought supplies, is extremely high.

The relatively large airport in Iliamna also serves Newhalen. As mentioned above, both villages share a school as well as a post office.

The Village Council is the Newhalen Tribal Council. The regional Native Corporation is Bristol Bay Native Corporation and the regional Native non-profit is Bristol Bay Native Association. The Newhalen school is part of the Lake and Peninsula School District. Newhalen was incorporated as a city in 1971.

Pedro Bay

Pedro Bay is tucked in against immense mountains on the northwest edge of Iliamna Lake. Large flat valleys open up and provide for a good landing strip just west of the village. From Cook Inlet, Pedro Bay is hidden behind the sharp mountains and volcanoes of the Aleutian Range, and a flight out might mean passing between the powerful Redoubt and Iliamna volcanoes. The village is approximately 175 air miles southwest of Anchorage on the upper Alaska Peninsula.

Although the southern side of Lake Iliamna was historically occupied by Yup'ik speaking peoples, the northern side was mostly Dena'ina people. Pedro Bay village, along with the Old Iliamna village site is situated at the inner end of the Iliamna portage, which connects out to Iliamna Bay on the coast. The portage served as a conduit for people and trade goods in and out of the region. Trade with Russians, however, did not begin smoothly, and there were battles between Dena'ina and early Russian fur traders over trading practices in the early 1800s (Townsend 1965).

Joan Townsend conducted archeological research in the Pedro Bay area in the 1960s and identified stone artifacts that date back some 4,500 years (Reger 2005). With the Pedro Bay Village Council, archeologist Douglas Reger has conducted research near the village in more recent years. Reger found that over time, various groups of people have lived in different sites above the bay. People lived at about 20 or 25 feet above the current lake level, corresponding to shifting levels of the lake. Joan and Sam-Joe Townsend dated occupation at Pedro Bay to the mid-1700s (Townsend and Townsend 1961:53). By 1900, the population had dwindled as people moved to a village site that was later to be called Old Iliamna. A man named Old Pedro was the sole resident of the village site in 1906, and the current village derives its name from him (Townsend 1965:79).

In the 1930s Old Iliamna was abandoned and people moved back to Pedro Bay (Reger 2005:3). A post office was established in the village in 1936. Around 1952, school lessons were taught in a private home in Pedro Bay. In 1954, a public elementary school teaching only grades 1-8 was opened by the Territory of Alaska (Townsend 1965:326).

There were early Russian Orthodox influences in the community, but missionary activity by the Alaskan Arctic Mission in later years has meant that the majority of Pedro Bay residents are now members of that fundamentalist Protestant Church (Johnson et al. 1997:38). A village-owned clinic was built in 1979, and in 1982 a new school was built, teaching students from grades 1-12. The current school is part of the Lake and Peninsula School District.

People travel back and forth across the lake on small skiffs. Local ground transportation consists of four-wheelers, and a few trucks on limited roads; trucks and snow machines are used on the frozen lake in the winter. A new fueling station was recently installed to provide better access to fuel for these vehicles.

The historic portage trail from Iliamna Bay on Cook Inlet to Old Iliamna on the lake is now a road, which continues to provide a route for supplies to be brought in to the lake villages. This route corresponds in part with a proposed route for mining transportation in and out of the proposed Northern Dynasty Pebble copper and gold mine. The mining road would continue past the village of Pedro Bay, and this is a grave concern for many residents. Besides this portage, Pedro Bay is more practically accessible by air or by water, and is not connected to a larger road system.

The federally recognized tribe of the community is headed by the five-member Pedro Bay Village Council. The village corporation is the Pedro Bay Corporation, and the regional corporation is the Bristol Bay Native Corporation.

By 2005, Pedro Bay had grown to around 70 people, all of whom continued to participate in subsistence activities (Fall et al. 2006). Some residents work in the summer tourism business, and large lodges are built here and there around the bay. The majority of the residents of Pedro Bay are Dena'ina, and subsistence practices continue to be of central significance to them. People rely on hunting moose, rabbit, bear, ptarmigan, ducks and other animals. They pick blueberries, cranberries, blackberries and salmonberries, and gather wild celery and onions (Fall et al. 2006; Alaska Dept of Community and Regional Affairs 1982, Pedro Bay). They are also able to harvest freshwater seals, which inhabit the east end of Iliamna Lake and its islands.

POPULATION SHIFTS

The total number of Dena'ina people in (and outside of) Alaska today is hard to know for certain. Some estimates are around 1,000, others are more than twice that. James Fall compiled a table showing estimates of Dena'ina population from pre-contact to the 1980s from a variety of sources (Fall 1981:110-111; 1987:16). Estimates in Fall's table suggest a pre-contact population of perhaps 3,000. Fall noted, however, that many of the early estimates may have been low, and that oral accounts suggest higher numbers of Dena'ina in the region in pre-contact times (1981:106). Census estimates in the early 1800s ranged around 1,500 or less. It is hard to know the conditions under which these population approximations were made, especially given the distance of the settlement areas from urban centers. The estimates, however inaccurate, do probably reflect a significant drop in population for the decade or so following the smallpox epidemic of 1836-1840, with total numbers of estimated population to be in the low 800s in the mid-1840s. If the purported numbers of Dena'ina around this period were somewhat accurate, James Fall noted that the epidemic would reduce the population by 50 percent in just seven years (1981:118; Fedorova 1973). Joan Townsend suggested that the Dena'ina population could easily have reached 1,000 in the last half of the 19th century (1965:98). The influenza epidemic of 1918 may have contributed to another significant drop in the early decades of the twentieth century. A U.S. Census count in 1910 showed the fairly low count of 672 Dena'ina, and a few decades later Osgood suggested a total of around 650 (Osgood 1937:20; Fall 1987:16).

Table 1: Populations of Resident Zone Communities according to the 1990 and 2000 U.S. Census

	1990	2000
Lime Village	42	6
Nondalton	178	221
Pedro Bay	42	50
Port Alsworth	55	104
Newhalen	160	160
Iliamna	94	102

source: http://factfinder.census.gov)

Even in more recent decades, census numbers for rural Alaska need to be considered carefully. Because many people in rural areas spend a great deal of their time away from their home villages, the number counted at any particular census is often lower than the total number who may live—even part-time—in a household in a given year. This may be particularly true for Athabascans, who were quite mobile in the past and continue to be so today. It is likely that some of those temporarily staying in other places outside the village home would be missed in the census count. The

2000 census numbers for the contemporary resident zone villages included in this study may be somewhat low, and are probably more accurate for the village of Nondalton than for Lime Village, for example. We know that there are more than six people who reside in Lime Village. Accurate numbers are hard to obtain due to a variety of reasons. Tyonek, another Dena'ina community in the region, had a population of 193 in the 2000 census.

Numbers of Dena'ina, and of Alaska Natives in general, have been steadily climbing throughout the last several decades. Because census data are gathered based on villages, and because Dena'ina live in Anchorage, and many other towns and cities in Alaska and elsewhere, it is impossible to know what the current population numbers are. While estimates for the total Dena'ina population in Alaska today range from about 1,000 to 2,500 in rural and urban areas combined, some Dena'ina people have suggested much higher numbers.

In conclusion, the history of settlement and land use across these village areas is interconnected and fluid. Contemporary villages are often reconfigurations of older villages which have been abandoned for a variety of natural and human-induced causes. Environmental changes, shifts in streambeds or siltation of shorelines, reduction in available firewood, illness, conflict and other contributing factors can lead to relocation. But if we view the prehistoric, historic and contemporary dispersion of human settled areas, we would see a complex scattering all across the entire Lake Clark region, vividly illustrating a long chain of continuous occupation of this region. These sites extend from prehistoric sites several thousand years old that are not readily visible to a casual visitor, to recent structures. Dotted along lakeshores, riverbanks and in grassy meadows, tucked into the wooded landscapes on hillsides and in valleys, and sometimes layered one on top of the other as they break down with age, are the remains of countless shelters. In and around these sites, whether broken down in the soil, or evident in fish racks, cabins and churches still standing, are the signs of people's activities. Dena'ina people continue to traverse these landscapes to hunt, fish, gather berries, and live on their homelands.

River beauty flowers on the Lake Iliamna shore.
Photo by Erin McKittrick.

Lives in Motion: Subsistence-based Culture and Economy

MOBILE PEOPLE

Lime Village elder Emma Alexie's account shows us the rhythm and flow of subsistence-based lifestyles that required moving with the availability of resources. Subsistence has historically been the key reason that people travel about in the greater Lake Clark region, but over the years, and especially with the aid of air travel, there are more reasons to travel around than ever. Consider the following variety of examples of travelers in the Lake Clark area:

- Trefon Balluta (c1858-1925) was a prominent Dena'ina man who lived at the Telaquana settlement with his family. People say he could walk the Telaquana Trail, from Kijik to Telaquana Lake—over fifty miles—in a day.

- Oren Hudson remembers flying numerous trips a day to get barrels of oil in to the Nondalton school following an oil leak one winter in the 1950s. For more than fifty years, he has flown goods and people throughout the Lake Clark region, and more broadly across all of Alaska. Now in his eighties, Oren is still flying and spends most of his days at the hangar where his airplane is kept.

- Peter Merryman and others in Tyonek told a story of their recent seal hunt (in 2004). Peter said they got into the truck and drove up to the hunting area. They drove within shooting distance, got out of the truck and shot the seal. Peter laughed about the fact that he had never hunted seal before, and once he did, it was by driving straight to it.

- Shauna Sagmoen, a young woman in her early twenties, spends some of her year in Lime Village, sometimes attends UAF in Fairbanks, and sometimes takes distance courses via computer and telephone. She travels to Anchorage or to other villages to study Dena'ina in a language program, and for many other reasons. Like many Dena'ina, young and old, who live part-time in village areas and part-time in urban areas, she travels by airplane on average six to ten times a year.

In considering the archeological, historical and ethnographic record for the Lake Clark area, one striking feature that becomes immediately apparent, is that people who occupied this land were—and in some new ways still are—highly

Where's that Alaska?
You name places with me.
Name the places with me.
We hunt.
Grandma and they have their fingers in the snares at
Dazdlit Dazdlu, mountain on the Swift River.
That's where they used to eat
and get their food.
Nowadays, you've got everything.
Where our Dad used to tell us about,
they used to stay on Swift River.
They used to catch fish
when they traveled up there.
My dad and his grandfather,
When they killed something,
We'd fry meat on sticks and eat,
and eat, we didn't have any salt.
We scraped sap off of birch trees and we'd eat it.
When we started going over towards there, we'd pack
when we started going over, you started packing.
Sometimes it was very hot and lots of mosquitoes.
They were packing even their babies—
packing and hot.
Nowadays you just jump in the airplane and go.
Those days, we packed, and hot—
they'd pack, and when they came to the end of the day
they'd just lie down anywhere.
They'd make fire and fry some meat
and go to bed.
In the morning when they'd come to,
They'd pack and start off.
There were no pancakes or hotcakes to fry
Nothing!
Then they'd eat and start off.

Photo 15. Telaquana Trail, West of College Creek; Les Wernberg (left) and Gabriel Trefon (right); 1938. NPS photo H1087.

mobile. People crossed vast territories in pursuit of hunting, gathering and fishing areas, as well as places that were politically agreeable for them to reside, in relation to neighboring groups. For centuries this travel was done by foot, with sleds, and by boat. Travel was eventually assisted by dogsleds, followed by motorized boats, airplanes, motorized snow machines, and off-road vehicles. As James Kari and Priscilla Russell Kari noted in their 1982 collection of Dena'ina place names, "To travel and survive in such a range of environments using their aboriginal technology (the objects they made before they had manufactured goods) demanded great skill and knowledge" (Kari and Russell Kari 1982:8).

> In aboriginal times, before the Tanaina moved into the coastal and Iliamna areas from the interior, we may assume that they were basically hunters rather than fishermen and were organized on a Central Based Wandering level. Even after the major portion of the Tanaina moved to the coast, those who remained in the interior at places like Mulchatna, appear to have continued a Central Based Wandering mobility pattern. Petroff (1891:3) noted that the Mulchatna people remained during the winter in log houses covered with earth, but roamed in the summer. (Townsend 1965:349-350)[23]

People's lives revolved around subsistence. Travel was directed by people's knowledge of the availability of particular resources under certain conditions, which called for a fair amount of flexibility within regular seasonal patterns of movement.

Archeologist William Workman described human mobility as a form of adaptation (Workman 1992). Counter to common assumptions that the most desirable form of human settlement patterns would be a permanent year-round settlement in a single place, Workman argues that, rather than seeing constant human movement as a disadvantage, or a drawback, mobility can be an advantageous and enjoyable way of life (1992:66).

[illegible] "wander" or "roam" in this context may suggest an aimlessness in people's movement which simply was not the case with the Dena'ina. Travel was intentional and patterned, and revolved around an intricate knowledge of available resources. Dena'ina people returned again and again to important sites for hunting, fishing, trapping and gathering.

> Mobility permits direct exploitation of a wide variety of resources, an advantage since the necessities of life are seldom available in a limited area. A mobile group can take advantage of different microenvironments within their territory. Groups who move their settlements frequently are less likely to deplete the game, firewood and other resources in the area. Highly mobile groups constantly gather vital environmental information. Mobility can remedy both the social stress caused by intensive social interaction in large population aggregates and the boredom from protracted stays in small groups under rigorous environmental conditions. (Workman 1992:66)

Travel enabled people to visit and interact with others, to celebrate, search for suitable marriage partners, trade goods with one another, and share stories and news.

Features on the landscape—mountains, streams, particular rock formations, bends in rivers, glaciers and countless other elements—were named with descriptions that helped to describe and map the landscape. As James Kari and Priscilla Russell Kari noted, the names show that the Dena'ina made use of "virtually all of the country in the language area, including even remote areas of the Alaska range" (Kari and Russell Kari 1982:13).

When Linda Ellanna and Andrew Balluta interviewed people for their *Nuvendaltin Quht'ana* project, each interview was based around a map. Individuals traced their life's travels on a map, showing where they lived as children, where their family fish and hunting camps were, where they lived after marriage, where new camps were established, and so on. Each one was an intricately detailed map of memories over vast territories, including numerous place names, and travel routes. These interviews are an important and valuable resource today, as they include detailed knowledge about place names, the routes that various families traveled over several generations, and an intricate knowledge of the greater Nondalton and Lake Clark regions.[24] Quite clearly, subsistence was historically one of the key reasons for travel, and that is still true today.

They'd walk until they'd get hungry again and then start a fire and fry.
They'd fry meat, and eat, and drink
Hudson Bay tea. Start off again.
Sometimes their mukluks would wear out
And they'd stop and patch their soles
with sinew.
Then they'd put on their mukluks and start again....

When we'd come back out in fall time
And then we'd go up and fish for whitefish at
Hek'dichen Vena.
When we'd come out we'd go up to Hungry Creek,
make our fishtraps and hunt for trout,
At the falls, waterfalls
They'd travel in the route of where they put up fish.
At the falls they'd fish for whitefish.
When they'd kill something, they'd fry it on a stick
by the fire, and eat.
And then it starts getting cold and the lakes freeze
While they're still out there.
And then they'd go back to their regular home.
They'd back-pack out.
Back-packing, back-packing all the way out.
They bring their families back out, their wives and children.
And then they'd go back.
They'd push sleighs and load the whitefish.
And they'd haul it out.
They'd eat frozen whitefish eggs.
They'd go out with an axe in their hands and eat frozen whitefish eggs.
(Emma Alexie 1981, Ti73(2)

[24] Maps from the Ellanna and Balluta (1992) project are being incorporated along with place-name maps compiled by James Kari and James Fall in *Shem Pete's Alaska* with maps for the Lake Clark area in a 2005-2008 NPS study of place names and landscapes stories from the area.

Trails and Passes

While the violent collision of mountains that rises so dramatically west of Cook Inlet often served as a barrier between coastal events and inland communities, the mountains were not impassable. People made their way around and over the spectacular Chigmit and Neacola mountains via numerous routes that criss-cross the region. In the Lake Clark area, certain trails and passes were used as tried-and-true routes to get from one area to another.

It is no surprise that the course of water can also serve as the most accessible route for humans. One of the key routes cutting across the region goes along the shores of Lake Clark northeast to Little Lake Clark, and then follows either the Tlikakila or Chokotonk Rivers up and over Lake Clark Pass (*Qizhjeh Vena Tustes*). Travelers could then follow along Blockade Lake and traverse the Blockade Glacier to where it drains into McArthur River, which they could follow down to the marshy flats below. From there people could travel to Tyonek, or other points along the coast (see Ellanna and Balluta 1992:9, 18).

Other passes that provided passage from the inland areas eastward to the coast or vice versa were Merrill Pass (*Tutnutl'ech'a Tustes*), which allowed for travel between the Necons River and Two Lakes on the west, to the Kenibuna Lake area on the East. The Telaquana Pass (*Dilah Vena Tustes*) connected the Telaquana River and Telaquana Lake—a point of relatively easy contact from many other areas such as the Mulchatna River, Stony River, Whitefish Lake, and other areas around the Bonanza Hills—to the Neacola River system (*Nikugh Vetnu*) to the east. Chickalusion Pass provided a route from Lake Clark Pass to the head of Twin Lakes.

These passes today see much less foot traffic than they did in the past, but they provide the air space necessary for small airplanes to follow the same routes that Dena'ina historically did on foot to get back and forth between the inlet and interior areas.

The Telaquana Trail runs roughly north-south, joining Lake Clark and the historic Kijik settlement area to Telaquana Lake where Old Village and other settlements were situated. Pete Trefon noted that in the past, people walked the Telaquana Trail from Kijik to Telaquana Lake in a day.

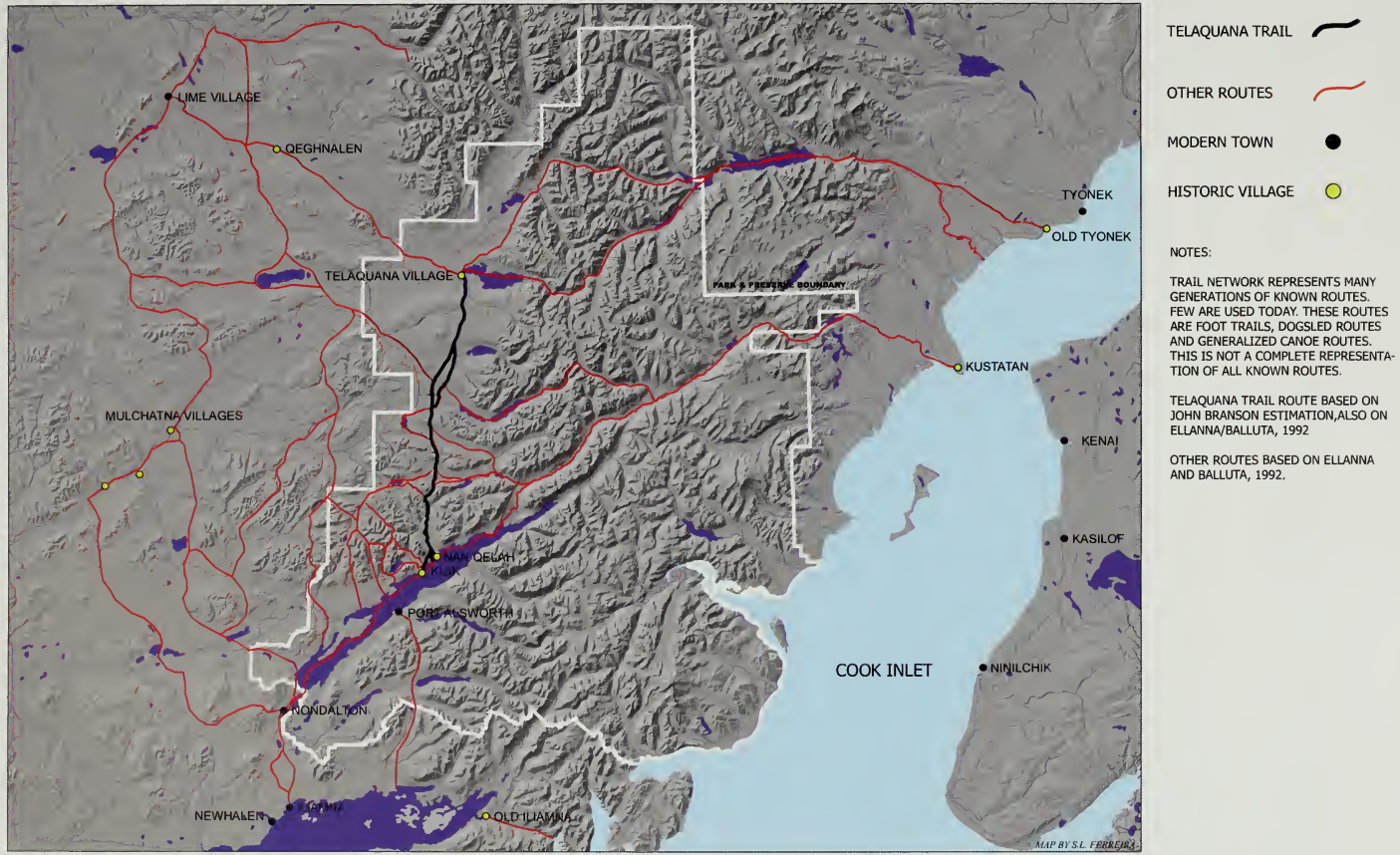
> ...[E]verybody. All of the older generation used that trail. Them young guys they don't go nowhere. Far as they go with a snow machine or airplane, that's [the way] they go, but they don't ever go on the trail. (Pete Trefon 1975)

Linda Ellanna and Andrew Balluta wrote,

> ...[E]lders of Lime Village and Nondalton, who were born on the Upper Stony River, remember stories about Dena'ina going from *Qeghnilen* over Merrill Pass to Tyonek on Cook Inlet to get gun powder, shells, lead, tobacco, and other trade goods. Some older people remember trapping in these passes as young children....
>
> There are numerous oral historic accounts of the inland Dena'ina—who resided in the historic communities of Kijik, Telaquana and *Qeghnilen*—visiting the Iliamna Dena'ina in Old Iliamna Village, located at the head of Iliamna Lake. Such visits had both social and economic functions, including the acquisition of trade goods. (Ellanna and Balluta 1992:18)

People followed the Newhalen River down from Lake Clark to Iliamna Lake (*Nila Vena*). From there they could travel to Iliamna Bay on the Inlet side, or to Bristol Bay via the Kvichak River. Freight was pulled over the Iliamna portage by dog sled and by horse-drawn wagons during the late nineteenth and early twentieth centuries (Ellanna and Balluta 1992:21).

Fig. 8. Combined trails and passes map, compiled by Samson Ferreira.



One travel route people commonly took from Lake Clark to Old Iliamna followed the Tanalian River from what is current day Port Alsworth south to Tazmina Lake, and then follow its drainage on down to Lake Iliamna. This pass was called *Tanilen Vetnu Tustes*.

Priscilla Russell Kari has recorded trails that residents of the Lime Village area have used historically, as well as some that have been developed more recently, to facilitate resource needs (Russell Kari 1983:71-75). Local travel patterns she describes for the Lime Village area are generally true for other village areas as well. Trails on land are typically utilized year round, using dogsleds or snow machines in the winter. After freeze-up, waterways become hard surface transportation routes, as do lowland flats. Low, swampy areas are avoided in the summer, and higher ridge trails are preferred (Russell Kari 1983:72).

On a smaller scale, each Dena'ina family developed its own hunting and trapping routes that ranged over many miles of territory. They followed streams, setting trap lines, or made special trips up into the mountains for squirrel hunting. Fishing also took them up and down waterways.

For centuries, the basic mode of transportation for Dena'ina ancestors was travel on foot, with necessities carried on their backs attached to a packboard (*hał duten*) across their chests, or on a small hand sled (Townsend 1970:8). Children were carried on cradleboards. Dogs (*tik'a*) were used in the pre-contact period for hunting and packing, and a few dogs, assisted by people, may have pulled small sleds (Behnke 1978:47-48).

In the mid-1970s, people in interior villages began to purchase and use all-terrain vehicles (ATVs), also called off-road vehicles (ORVs), to assist them in basic local transportation, subsistence activities and for recreational purposes. Early models had three wheels; they were later replaced by models with four wheels, called "four-wheelers." ORVs were practical for hauling wood from nearby woodlots, accessing some hunting areas around villages, and for general local transportation (NPS 1984:17). Today ORVs are sometimes used when snow is patchy or the ground is muddy, often

Photo 16. Daniel and Marie Standifer Sr. travel from fish camp to fish camp via 4-wheeler along Beshta Bay, southwest of Tyonek—outside the park. Karen Gaul photo.

resulting in damaged trails and the cutting of new trails, which can result in "braiding," and accompanying erosion and degradation. With snowfall coming somewhat later in recent decades, the ORV use season lengthens as the snow machine season shortens (Behnke 1978).

Water

> Well, long ago when the Dena'inas from here used to go down Bristol Bay—no motor boat—sail—fish boat, they call it. And along Nushagak River there was nothing but *Dudna* [Yup'ik, down river] people. They'd stop and gamble (*ch'enlahi*) and have fun. They get together all the way up Kvichak River and they probably stop in Kakhonak, the same thing. And they used to get together in Newhalen. (Albert Wassillie 1985)

Waterways have long served as highway systems for Dena'ina people (Behnke 1978). And, in a land where navigation by the sun is not always practical in winter months, detailed place-name systems, particularly along rivers, serve as spoken and memorized maps (Kari and Russell Kari 1982). The Dena'ina language itself, Nancy Lord notes, "emphasizes directions, distances, and relative positionings" and "builds into one word locational information that would take an entire sentence in English" (Lord 1996:46; see Kari and Russell Kari 1982).[25]

Waterways, of course, take various forms at different times of the year. In summer months people could boat to and from various fish camps via rivers or along coastal areas. They learn the best channel routes and watch for hazards (Russell Kari 1983:67). Aluminum boats have replaced hand-crafted wooden and skin boats of the past, and sail and paddle power have been replaced by motors (Russell Kari 1983:64).

The transitional period from the flowing rivers of summer to frozen winter conditions can be a treacherous time. Ice on the lakes forms at different times each year, and its depth varies as well. People constantly gauge the ice for strength to be sure of its safety for crossing not only on foot but, as the ice strengthens, with snow machines, all-terrain vehicles and trucks (Ellanna and Balluta 1992:21).

Sometimes people continue to travel by boat even as ice floats in the water, risking boat damage or getting frozen in. Lakes present unique conditions and risks. Sudden weather changes, high winds and consequent waves can result in dangerous conditions with little time to respond (Russell Kari 1983:65). Gauging the complexities of these constantly changing conditions, and judging the equipment and human energy necessary to navigate in them, is a broad area of Dena'ina traditional knowledge that is learned and passed down through generations. Such knowledge is shared through ongoing talk among community members.

> Since transportation by boat, snow machine, all-terrain vehicle, truck or foot is essential to hunting, fishing, trapping, and gathering activities, the conditions of Lake Clark, Sixmile Lake, Lake Iliamna, the many rivers and streams of the area, and trails and passes are common and important topics of conversation throughout the year. (Ellanna and Balluta 1992:21-22)

For several generations now, people have noted in oral history accounts that freeze-up arrives later and later, and breakup comes earlier than in years past. People report overall less snow and ice, and overall shorter and warmers winters with wetter and mushier conditions (Ellanna and Balluta 1992:21). Nondalton residents have also noted later timing for fish runs, fewer fish, and differences in the color and texture of fish. These changes have affected subsistence fishing and processing (Stickman et al. 2003).

Because land gives way to water and water reverts to land again fairly frequently over the entire region, portaging is a common practice as well. In the past, sometimes people used dogs to drag canoes across the land to the next body of water. If snow was on the ground, such an endeavor was made much easier. As an example, Priscilla Russell Kari said for the Lime Village area:

[25] Priscilla Russell notes that people in Lime Village in the mid 1980s were still occasionally making and using moose skin boats (1983:66).

> Lime Villagers commonly portage between Trout Lake, Kutokbuna Lake, and *Qedeq Vena*, the lake east of Kutokbuna Lake, as well as from these lakes to Tundra Lake. No navigable streams connect these lakes which are very important for spring and fall resource harvest activities. (Russell Kari 1983:68)

Dena'ina also used coastal waterways for travel up and down the inlet between the settlements of Tyonek, Polly Creek and Kustatan. Clamming and fishing along the Inlet meant seasonal travel up and down the shoreline as well. Peter Kalifornsky recounted a story of going hunting with other men in the Kustatan area, and getting nine bears. It was apparently early spring.

> Two days after that we had taken it all home to camp on sleds. After that, the ice went out of the Inlet. We loaded them all in the dory and took it to Tyonek. We brought bear meat to the Tyonek people in 1930. (Kalifornsky 1991:277)

Snow and Ice

Once snow begins to cover the ground in the fall, travel conditions change. Historically, people used dogs and sleds, snowshoes, and other technologies for crossing snow, ice and glaciers. Frozen surfaces were not static ones, but constantly changing. Dena'ina travelers gauged the texture of the snow, the weather conditions and possibilities for more snow or storms, ice thickness and strength, and safe routes across treacherous glaciers and passes.

Traveling in the snow and ice also meant managing the bitter cold. Clothing, boots, and mittens had to be warm enough for temperatures that dropped and stayed twenty to fifty degrees below zero for long stretches at a time. It also meant a level of physical energy much greater than that necessary for summer travel.

Crossing glaciers required particular skills and endurance.

> Oral historic accounts commonly record the treacherous travel through the Lake Clark Pass with its multiple glaciers. To cross a glacier, the Dena'ina recount that they used poles to locate crevasses. They would then camp on the glacier and bridge crevasses with these poles. Then they walked to the coast and remained in Tyonek for a long time, until they were well rested, then returning home. (Ellanna and Balluta 1992:18)

One famous glacier crossing story in the Lake Clark area is about a group of people traveling from Kijik to Tyonek. The story was recorded by Steve Hobson (1981, Ti72(3)) and also by Antone Evan (1980, Ti65 (1) and (2)). Here is Antone Evan's account:

> Long ago before our time, at Kijik village, there were no airplanes, no cars, no motors, they used to travel by oars and rowing a boat. In the winter time, they used to travel between Tyonek through Lake Clark pass... They used to travel through Lake Clark pass for a visit long ago. People from Kijik were traveling to Tyonek; they went to Tyonek and visited with Tyonek [people] during the winter. They started back through Lake Clark pass. About halfway up that pass, there is a glacier. There are many crevices [crevasses] in places that are five feet wide, and it was snow covered. A sled that was ahead made it across the crevice and the sleigh that was behind fell in. The sleigh went in the crevice; he had three dogs that stopped the sled from going down in. The dogs held the sled and it didn't go all the way down. They pulled the sled up, but when they got the sled back up, they found the child wasn't in the sled. Looked like the child had fallen out of the sled. They took all the sleigh lashings and the extra ropes they had, rawhides, and they spliced the ropes...The child's dad told them to tie the rope around his waist and lower him down. And then they tied the rope around his waist and started lowering him down. It was pretty near the end of the rope when, just about then, he shook the rope. And then they pulled him out of the crevice and he had the child with him. They went below the glacier down towards Lake Clark and made a camp. When the child was in the crevice, he put his hand out of the covers. His hand was frozen. In those days, there were no doctors. The child lost his hand. And then they came back

to the village and the child grew up. He became a man, his parents, father and mother have died. A man was handicapped with only one hand. He grew up and had children, he lived to be an old man, he died. They used to tell about these paths that they used to travel through. They used to tell about this. (Antone Evan 1980:91(3) and Ti65(1) and (2) in Ellanna 1986:A-41)

In Steve Hobson's version, the child is named:

> That was Singa Kankanton. That's Johnny Kankanton's grandpa, he was little bitty, about that big, when he went down in that glacier. Long, long time ago. (Steve Hobson 1981, Ti72(3))

Pete Trefon described how difficult it was to be the first to break the trail in snow with dog sleds. "Three or four guys go together [and] take turns breaking trail, hook their sleds together" (Pete Trefon, 1975). The dog teams consisted of seven to nine dogs. In deep snow, breaking trail was hard work for the men and the dogs.

According to Townsend, dog sleds were probably introduced by the Russians around the same time as muzzle loading rifles, in the mid-nineteenth century (1970:9). Behnke suggests that the practice of setting up dog teams and harnesses in two rows in front of the sled may have been borrowed from American settlers in the early 1900s (Behnke 1978). Once teams of dogs were used with sleds, they were employed for use with trap lines, to pull loads to trading posts, or to transport mail.

Many families in most villages kept dog teams up through the middle of the twentieth century. In the early 1960s, snow machines were brought in to Nondalton and other villages (Behnke 1978:45; Russell Kari 1983). Snow machines, as Behnke notes, radically changed winter activities in and around Dena'ina villages. They reduced the amount of time hunters needed for traveling. Over the decades, more powerful machines have meant increased speed and shorter hunt times, eliminating the need to set up hunting camps. While a few families continued to use dogs, snow machines were quickly adopted for running traplines, hauling wood, hauling supplies and mail, and for playing in the snow (Behnke 1978). Snow machine trails wend around every village and into surrounding areas during winter (see Russell Kari 1983:70).

*Photo 17. Natasha Zackar ice fishing for trout (*shagala*) on Sixmile Lake in 1987. JoAnn Delkittie photo.*

In the early 20th century, the airplane became another significant form of transportation to the Dena'ina living in the Lake Clark area.

The Cultural Importance of Aviation for the Dena'ina of *Qizhjeh Vena* (Lake Clark) and *Nila Vena* (Lake Iliamna)
By Michelle Ravenmoon

Nunujehi dnaghelt'a- There are lots of airplanes" –Albert Wassillie

Today in Alaska, no matter where you are, a day doesn't go by without the buzz of an airplane flying somewhere in the skies. In 1913, ten years after Orville and Wilbur Wright made their historic flight at Kitty Hawk, aviation arrived in Alaska (Fratzke 2004:7). The introduction of aviation to rural Alaska has contributed to transforming the Dena'ina Athabascan culture. The Dena'ina communities within the Lake Clark National Park & Preserve region have depended on airplanes for over 70 years. Like many rural Alaska villages, natural barriers such as vast distances, surrounding oceans, mountainous terrain, and numerous wetlands, rule out roads as a viable means of access to Lake Clark. Most major urban markets can only be reached by airplane. The Dena'ina, a highly mobile society, were impressed with air travel and integrated it into their culture. Aviation burst into Alaska and it left its mark upon Native people forever.

In 1930 the cost to fly to Lake Iliamna from Anchorage was $300 a person, and in 2004 the average price per person round trip is $280. While the price has not changed a great deal, the technologies and use of small aircraft in the region has changed significantly in 75 years. The Iliamna area saw its first airplane when pioneer pilot Russell Merrill landed Anchorage Air Transport's Travel Air 4000 at Old Iliamna in 1927, where he landed on weather hold and stayed overnight (MacLean and Rossiter 1994:16). In 1929, Merrill was the first pilot to land at Seversen's Roadhouse, which is now present-day Iliamna. Russell Merrill's aviation pioneering was the beginning of what would be a long lasting regional aviation hub at Iliamna. Merrill Pass was named after Russell Merrill; he disappeared on a flight in 1929 and was believed to have perished in the Cook Inlet. Many pioneer pilots were to follow him, such as Matt Nieminen who was the first pilot to land at Tanalian Point in 1930 (Branson 1998:48).

Flying an "air machine" was never easy and flying in bush Alaska only added more obstacles. Jenifer Fratzke, author of *Alaska's Women Pilots*, said:

> Preparing aircraft for flight and keeping them running was no easy task. Today we have multi-grade oil that compensates for temperature. But in early days of aviation, radial engines used primarily fifty-weight oil. At cold temperatures the viscosity was more like tar than lubricant, and if you could get the engine started, you were lucky. If not, a pilot remained stranded in the Alaska wilderness and waited for rescue or---walked out. (Fratzke 2004:7)

Open cockpits were common on the early airplanes and pilots had to be well bundled, usually in a parka. Crashes happened frequently; however, fatalities didn't occur quite as often as today, perhaps because airspeed was much slower than in modern airplanes. Being a pioneering pilot meant really knowing your airplane; pilots would never know if they would run into a situation

Photo 18. Airplane toy: Russ Merrill's Travel Air 4000 at Old Iliamna, 1927. NPS photo H66, courtesy of Helena Moses.

where they would have to put their plane back together again out in the woods, but chances were high in the early years of flight. Nevertheless, airplanes made it to Lake Clark and Iliamna.

At the time of the arrival of aircraft, a cash economy was already a part of the Dena'ina life, as they had hunted and trapped furs for the Russians from the 1750s to 1867. Working at the canneries in Bristol Bay and assisting the gold miners in the late 1800s furthered the reliance on a cash economy for goods such as ammunition, sugar, tea, coffee, salt, and flour.

Historically, the Dena'ina traveled great distances by canoe, on foot, or by dogsled. Many traveled 40-60 miles out of their village to trap. After airplanes arrived in the area, the Dena'ina started utilizing the aircraft's services as a way to serve their travel needs. In 1985 a local pilot, Jack Vantrease, spoke about the Dena'ina men chartering his airplane service to bring their entire dog teams and sleds to the trapping areas for the season. The introduction of aircraft changed the way the Dena'ina traveled and shortened their time out of the village on the trapline.

Aviation transformed the Dena'ina language also. The Dena'ina language became threatened after Alaska's General Agent of Education, Sheldon Jackson, warranted a plan to assimilate Alaska Natives into mainstream American society around the turn of the century. English became the first language for Dena'ina children. Many new items found in our everyday lives,

such as computers, do not have Dena'ina words for them. However, before our fluent speakers exchanged Dena'ina for primarily English, they had a Dena'ina word for airplane, nunujehi. Not only did they have a noun, they also have several verbs to describe the act of flight. This demonstrates that very early the Dena'ina had indeed included airplanes as part of their world.

Admiration for airplanes helped integrate aviation into the Dena'ina culture. There are many Dena'ina pilots today. For example, Trygve Olsen, a Dena'ina pilot from Iliamna, founded Iliamna Air Taxi which is now a successful business serving south-central Alaska. Iliamna Air Taxi is now owned by Tim and Nancy LaPorte. June Tracey, a Dena'ina aviatrix, earned her private pilot's license in high school in 1969. She remembers seeing her first airplane when she was in sixth grade and knowing that one day she would fly herself. What Tracey enjoyed about bush flying was that it was a challenge; she said, "You must be on the ball and know your environment." She also stressed the importance of airplanes for the people of Nondalton:

> It is the only means of transportation out of here. It is one of the main things we depend on for fuel, groceries, medical supplies, mail, and a way to go to Anchorage. (Tracey 2004)

Photo 19. Ski plane taking off at Seversen's Roadhouse as residents and a dog team watch, ca 1935-37. NPS photo.

Historical photos show that the Dena'ina carved wooden airplanes. These photos illustrate Dena'ina carving skills which they utilized to make toys for their children. Today, you might still see exact replicas of airplanes among the Dena'ina. Nondalton resident Steve Hobson, locally known as "Butch," has a collection of carved model airplanes in his home on Lake Clark at Owl Bluff. Butch skillfully carved them out of birch and driftwood. His expertise as a carver is reflected in the delicate, beautiful, and intricate work he put into each model airplane. Butch himself was also a pilot at one time. The artful carvings of airplanes appear to be a reflection the Dena'ina's high regard for aircraft.

The reliance on and need for air travel has made it the success it is today, and ensures its continuation. Airplanes link rural villages to the outside world. Aviation provides the means for people to shop for food, clothing, furniture, and household goods; attain medical services; receive mail; and travel between villages. Many Dena'ina have demonstrated a great respect for aviation by becoming pilots, mechanics, and working in the field of aviation. The Dena'ina have shown that aviation is part of their everyday lives by including airplanes in traditional language, in work and hobbies.

Photo 20. Airplane carving: Alvin, Lagaria, Tom and Bert Foss, 1946. Photo courtesy Agnes Cusma.

Maps and Place Names

Steep mountains, glaciers, rolling hills, rivers, tundra, streams, dense alder, spruce forests, and grassy meadows were traversed by various means. Dena'ina people traveled over frozen ice, slushy snow, mud, and earth trail on foot, with dogs, packing and pulling, in hunting parties of two or three, or in large family groups for seasonal migration. People's knowledge of those landscapes, and the stories that are layered over it, are inscribed in the very words used to name the places. Many Dena'ina elders have dedicated a great deal of time to recording—with the help of James Kari, James Fall, Alan Boraas and others—place names for the greater Dena'ina territories. James Kari and Priscilla Russell Kari compiled around 1400 Dena'ina names in *Dena'ina Ełnena/Tanaina Country* (1982). The book *Shem Pete's Alaska* offers a rich record of place names, stories, routes and other cultural information for the Upper Cook Inlet region (Kari and Fall 2003). James Kari recorded names with Nick Kolyaha for the Iliamna area (Kolyaha 1999). For the Lime Village area, Priscilla Russell Kari compiled a place names map recording nearly three hundred names (1983). She notes,

> The breadth and density of the names is strong proof of the occupation and use of the area by Dena'ina people. Some of the recorded names are archaic Athabascan words with no obvious meaning to modern speakers. On the other hand, many of the names give fascinating insights into the traditional life of the Dena'ina. (Russell Kari 1983:76)

Linda Ellanna and Andrew Balluta recorded and compiled many names, gathered through numerous interviews with elders from the area, for the Nondalton area and the greater Lake Clark region (1992).

The Cultural Resources program at Lake Clark National Park and Preserve is conducting an ethnographic study which focuses on place names and landscape stories, extending the work of all of these efforts to map and record place names in the Lake Clark area. To date about 2200 place names are recorded for the Dena'ina language area, with more than 1150 in Lake Clark National Park and Preserve and surrounding areas. Storing the place names and related ethnographic and biographical information in one database and generating relevant maps and other interpretive materials will provide a valuable resource for Dena'ina people, park managers, and the interested public for years to come.

The Dena'ina were intimately knowledgeable about vast areas, and they navigate through those areas by following rivers and ridges, noting and naming landmarks along the way. Sometimes a place name resulted from an event that occurred on a certain spot. And, conversely, sometimes people had personal names that reflected a certain place. For the Dena'ina, as for the Apache of the Southwestern United States—another Athabascan group—studied by Keith Basso (1996), the names of places on the landscape document layers of history. These names and events are often retold in stories, and also in songs. Antone Evan recorded numerous songs that remembered places, people and events.[26] Place names served as mnemonic devices which contain or suggest a larger story or series of stories within them. Those stories are told as part of the process of teaching a place name. The teaching of a name is the teaching of a broader history or cosmology. When Euroamericans assigned new names to places important to the Dena'ina, many of these layers of significance, including particular events—whether trivial or more momentous—were eclipsed, and faced the threat of being forgotten. The use of new maps and new names rewrites history.

Lake Clark, for example, was previously called *Qizhjeh Vena* in the Dena'ina language (or, "a lake where people gathered"). In January 1891, Alfred P. Schantz led an exploration into the upper tributaries of the Nushagak River. John W. Clark, an agent of the Alaska Commercial Company, was a member of the party, along with a number of Native men. They followed the Mulchatna River to the Koktuli River, and then crossed the divide to the Chulitna drainage and descended to the long lake. They named it in honor of John W. Clark, and it has been called Lake Clark ever since (Branson 1998:4).

We can illustrate further with just a handful of examples. Alec Trefon, for example, described the Telaquana Pass as *Tuvughna Ten*, or "people from Tyonek went through there." Andrew Balluta added, "[T]he Tyonek people used

[26] Some of these songs, in translation, are found in appendices of Ellanna 1986.

the Telaquana Pass a lot. Lake Clark Pass was less accessible due to the glacier." Alec explained that *Dilah Vena* (Telaquana) means "that fish goes up the lake" or "the salmon goes up into that lake" (Alec and Pete Trefon 1975, Ti45; Ellanna 1986:A-30). Like the pronunciations and spellings of many contemporary place names in the region, this anglicized name Telaquana imitates the sound of the Dena'ina name. Other place names that are anglicized versions of Dena'ina are *Tanalen Vetnu* ("water flows creek") now Tanalian River; or *Taz'in Vena* ("fish trap lake") which became Tazmina.

The present-day name of Kijik Lake, a small lake tucked on the north side of Lake Clark, mimics the Dena'ina name *Qizhjeh.* Kijik is an archeological district and a National Historic Landmark, and is a site rich with many layers of cultural occupation from perhaps 1100 years ago until its Dena'ina residents gradually left in the late 1800s. Antone Evan recorded a song they used to sing for a funeral, or for a good friend. "When I came out to see *Qizhjeh Vena*, I saw what I was looking for." He went on to explain, "When I see Lake Clark, this reminds me of my dead relatives and when we used to travel, this is what I was crying for." (Antone Evan 1980, Ti65; Ellanna 1986:A-40).[27]

In recent years, many anthropologists and other researchers in the Alaska region and worldwide, have turned careful attention to the knowledge local people have of their environment, often termed "traditional ecological knowledge," or "TEK." Whether encoded in place names, or conveyed in general knowledge and conversation about the weather, fish runs, caribou migration routes, condition of the snow and ice, and memories of past patterns and conditions, this complex knowledge is taken seriously by researchers who have been trained in different models of observation and recording.

SUBSISTENCE ECONOMY: NATURAL AND CULTURAL RESOURCES

Photo 21. Salmon drying on a fish rack and a log cache along the upper Newhalen River below Nondalton Fish Camp. Between 1908 and 1913. NPS photo, H80.

[27] This poignant reading of the landscape, the sorrow it evokes for relatives that have passed on, and the capture of these emotions in song, has a remarkable parallel on the other side of the world among the indigenous Kaluli of Papua New Guinea (Feld 1982; Schieffelin 1976; see also Kari and Russell Kari 1982).

For the Dena'ina, as with many other highly mobile cultural groups in the world, a high degree of mobility has meant a rich and detailed knowledge that is applied to and reflected in subsistence practices. The Dena'ina people traveled across a landscape that pulsated with the seasonal ebb and flow of life. From the fresh green wild onions and the early catch of whitefish in the spring, to the pink runs of salmon and ripening of berries in the summer, and from the migration of waterfowl to the migration of caribou, Dena'ina relocated to harvest the ever-changing bounty of nature. Harvesting available plant and animal resources means attaching cultural value to those resources; they also become spiritually and culturally meaningful as they are processed, distributed, and consumed. Plants and animals are recognized, named, and categorized, and enter into the body of knowledge that the community shares, teaches, passes on and remembers. In this sense, natural resources are no longer simply "natural," but cultural as well. Infused with cultural significance, they become what we identify as ethnographic resources.

> The Tanaina economy was characterized by seasonal periods of abundance of resources such as waterfowl, caribou, and especially salmon, often followed by periods of scarcity, especially in winter. Therefore, large quantities of food were taken, processed and stored for later use, and also for trade. Different Tanaina groups were tied to each other through trading networks. (Fall 1985:7)

Coastal people traded salmon and marine mammal products with Upper Susitna and Yentna River people for meat and furs "These contrasting environments are commemorated by the Tanaina by calling the Tyonek area 'the mother of the earth,' for its marine resources, and the Susitna drainage 'the father of the earth,' for its lands resources of meat and fur." (Fall 1985:7)

Researchers have provided descriptions of the annual hunting, fishing and gathering cycle, i.e., the seasonal round, among the Dena'ina. Cornelius Osgood collected a fair amount of information about food procurement practices for all Dena'ina (or Tanaina) throughout the Cook Inlet region (1937:26-46). More recently, the sources richest in detail are the many oral histories recorded in both English and Dena'ina over the past three to four decades. Peter Kalifornsky's writings offer first hand accounts of hunting, meat and fish preparation, and the technologies involved (1991). Various reports for the Division of Subsistence of the Alaska Department of Fish and Game provide an in-depth look at subsistence practices in some of the related communities (see Wolfe and Walker 1987; for Nondalton, see Behnke 1982; for Lime Village, see Russell Kari 1985 and 1983; for all Resident Zone Communities of Lake Clark, see Fall et al. 2006). Linda Ellanna and Andrew Balluta offered a detailed description of the annual cycle for the Dena'ina of Nondalton and the greater Lake Clark region for roughly the last century (1992:139-172). James Fall also provided a succinct essay describing the seasonal cycle for the Upper Inlet Dena'ina, including the Tyonek (*Tubughna*) and Susitna (*Susitnuht'ana*) in *Shem Pete's Alaska* (Kari and Fall 2003:22-27). There are many more sources, including more recent interviews with Dena'ina people.

From all of these sources we can gain a good sense of what subsistence practices were like in the past, how some of those practices persist in the present, and how changes in technology, demographics, economy and regulations have permanently altered hunting, fishing and gathering practices for the Dena'ina. For example, bows and arrows and spears with stone, copper or antler points were used to hunt large game in the past. This technology was combined with fences and snares, and sometimes the use of dogs to herd caribou. People also used sling shots, snares, deadfalls and pitfalls. By the 1840s, guns were introduced to the Dena'ina, and were used for hunting, although ammunition was sometimes difficult to obtain (Townsend 1981:626).

While early encounters with Russians meant engagement in direct trade of fur for goods, these interactions quickly led to the introduction of cash. Commercial fishing and prospecting efforts all meant operating in a market system that involved cash earnings, store-bought goods, and even the stressful effects of credit. However, in some ways the uncertainty and difficulty of harvesting enough from the land through subsistence was somewhat offset by the steady availability of supplies through stores.

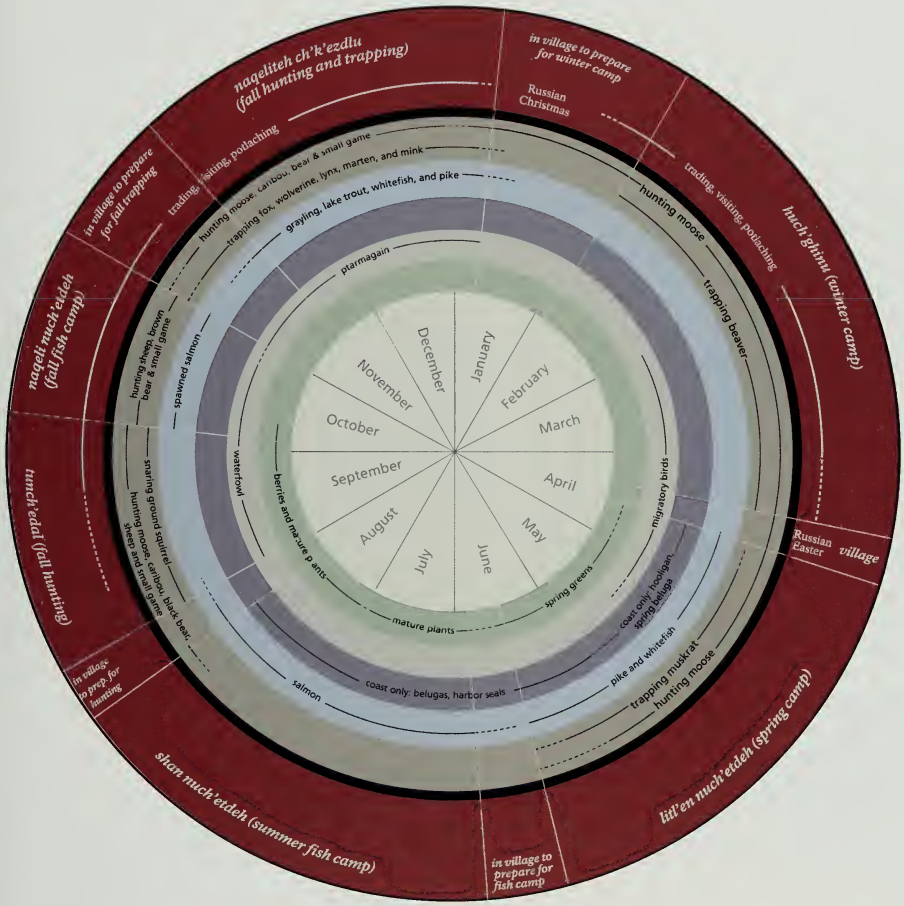


Figure 9. Dena'ina seasonal round. This illustration shows the some of the general seasonal activities of Dena'ina people, and the rhythm of the year, during roughly the last 125 years. Subsistence patterns vary from region to region—especially between interior areas and coastal ones—and from year to year. The wheel was compiled from a number of sources including Ellanna and Balluta 1992; Kari and Fall 2003; and Stanek et al. 2007. See especially Ellanna and Balluta for resource and season-specific rounds.

Transportation technologies meant that dogs that were earlier used for individual packs and for helping with the hunt were harnessed together for sled traction. As mentioned above, these were eventually replaced by snow machines in the early 1970s, Motorized off-road vehicles have enabled Dena'ina subsistence harvesters to access hunt sites in shorter amounts of time, and have assisted with hauling the meat out. Airplanes have provided the ability to locate herds of caribou or to spot moose, bear and other game for hunters to then pursue on the ground. But subsistence activities have persisted, even as they have evolved.

The following summary of seasonal hunting and gathering activities relies on oral histories and memories for accounts of traditions that stretch back several generations, to perhaps a hundred years or so. During this period, indigenous practices have been heavily influenced by the Russian and American presence in southcentral Alaska and in the world of Dena'ina people. Gaining a sense of the richness and detail of Dena'ina subsistence lifeways on lands that are now within National Park and Preserve boundaries gives us a fuller understanding of the cultural use and meaning embedded in the natural resources found within the park today.

Spring Camp

Seasonal activities for the Dena'ina do not correspond to a twelve-month calendar with four seasons of equal length. Instead, seasons were defined by weather conditions (and therefore travel conditions) and the seasonal presence of animals.

Spring—with its break-up of ice, the literal cracking open of water and earth for a new season of growth and abundance--is a good place to start the seasonal cycle of activities, or the seasonal round. Russian Orthodox Easter is celebrated in spring, usually in April. This was a time for people to return from winter hunting camps and prepare for the spring camp. It was when people could socialize and share through potlatches after weeks of relative isolation in winter camps (Ellanna and Balluta 1992:140).

During the long winter months when lakes and rivers were frozen, people fished through the ice:

> During the winter and early spring, people chopped holes in the ice and jigged for whitefish (*q'untuq' or telay*) and candlefish (*ghelguts'i k'una*). Burbot (*ch'unya*) and lake trout (*zhuk'udghuzha*) were also fished through the ice using set hooks baited with bits of meat or grayling. Once the ice went out, they fished for lake trout, Dolly Varden (*ƚiq'q k'qen*), whitefish, pike (*ghelguts'i*) grayling (*ch'dat'an*) and burbot using nets, traps (*taz'in*), and hook and line. (Stickman et al. 2003:11)

That's willow bark fiber.
They also make nets out of this willow fiber.
When they make nets out of this, when it's finished,
it has to be in the water so it won't get dry.
They keep this net in the water in a birch bark basket.
When it dries it's no good.
So they keep it in a birch bark basket in the water.
When they make this net, they take this cottonwood bark
and whittle it into fancy little corks,
And they put it on the net.
When they set it, when it's time to set it,
then they set it again.
They take a long pole and they take the end of the net
and tie it under so that when they pull it,
they pull the pole out,
then they stretch the net out with that long pole.
So they use these long poles to stretch the net out.
This willow, they also make a scoop out of.
They weave it into a scoop so that when they make a fish hole,
they scoop the ice out of it with the fish scoop.
And then they go fishing.
(Emma Alexie 1981, Ti73(1))

Grayling, whitefish and pike were traditionally caught in weir traps; later seine nets were set at the mouths of streams (Ellanna and Balluta 1992:145). Albert Wassillie described fishing for grayling with his father at Pickerel Lakes (*Vata'esluh Vena*), and getting two thousand fish in one night. "And that save[d] our dogs," he said (Wassillie 1985). Many kinds of fish were sometimes used to feed dogs. Pete Koktelash described spring camp at the mouth of the Chulitna:

> Lots of time in the spring time the whole village move there…they had lots of dogs, only they run short of dog feed around here, they move up there, lots of trout. Everybody had lots of dog feed. All kinds of trout. (Pete Koktelash 1985)

Spring time was also when residents of Tyonek would travel down the coast to Tuxedni or Redoubt Bay to dig razor clams, or trade for them (Fall in Kari and Fall 2003:23).

Spring camp, or *łitl'en nuch'etdeh*, was set up for pike and whitefish fishing, moose hunting, some waterfowl hunting and muskrat trapping (Ellanna and Balluta 1992:141). Traditional hunting technologies for large game before the introduction of rifles included

> …sinew-backed bows and arrows and spears with points of barbed antler, chipped basalt, ground slate or native copper. Spear throwers were also used. Drives, fences and surrounds were often used to capture caribou. (Townsend 1970:7)

James Fall noted that people of Tyonek and Susitna referred to April as *Nut'aq'i n'u*, or "geese month." Dena'ina hunted geese, cranes and swans, but these were not as plentiful as ducks. Canada geese and other migratory birds were harvested with steel traps, snares, blunt arrows, or firearms (Kari and Fall 2003:23; Ellanna and Balluta 1992:147-148). Ducks were dried and smoked (Russell and West 2003). Feathers from certain ducks were used for decoration. Ptarmigan, grouse, and other birds were hunted as well.

Photo 22. Mary Delkittie, a resident of Nondalton, with whitefish at Igiugig at the outlet of Sixmile Lake, 1982. JoAnn Delkittie photo.

Photo 23. Bright salmon drying at fish camp near Nondalton. Dan Young photo.

Traditionally, the work of building canoes and larger open boats called *niggiday* was undertaken in the spring. Women and girls prepared the hides for the boats. Pauline Hobson remembers scraping moose hide with her sister through the winter months, in preparation for boat construction in the spring (personal communication, 2004) when men and boys would construct the spruce frames. Canvas was used as a boat covering in more recent years (Ellanna and Balluta 1992:145). Eventually aluminum boats replaced the spruce frame ones.

Summer Fish Camp *(Shan Nuch'etdeh)*

Photo 24. Cleaning salmon at Evanoff's fish camp, located below Nondalton. NPS photo.

Salmon, perhaps the single most important subsistence resource, is at the heart of Dena'ina culture and identity. Waiting for the salmon to return is an act of faith that abundance always circles back around. The annual cycle is at its most full and exciting when the salmon are running, and people work long, hard hours through the extended light of day to catch and process fish.

> The summer months from June through the middle of August were primarily devoted to harvesting and preserving sockeye salmon (*Oncorhynchus nerka*) returning to Sixmile Lake and Lake Clark. Sockeye salmon were traditionally harvested using nets, log weirs and fish traps placed in spawning streams or by spearing from river banks. Lake trout, whitefish, pike and suckers (*duch'ehdi*) were also taken in salmon nets and used as dog food or dried for later use....[P]rior to the abandonment of Kijik, most of the summer fish camps utilized by the Inland Dena'ina around Lake Clark were located at the outlet of Kijik Lake. Contemporary fish camps are primarily located at the head of the Newhalen River at the outlet of Sixmile Lake and scattered along the shores of the Newhalen, Sixmile and Lake Clark (Stickman et al. 2003:11)

Residents of the upper Stony River used summer fish camps in a canyon upriver from the *Qeghnilen* village site. After the present Lime Village was settled, its residents established fish camps above the old *Qeghnilen* village site, but below the canyon (Ellanna and Balluta 1992:150; see also Russell Kari 1983). In order to prepare for the salmon season, people began to carry supplies to the fish camp locations, repair smokehouses and gather wood for smoking and for [illegible] beths, and prepare fishing nets and other equipment.

Photo 25. Mary Ann Trefon, who lived at Tanalian Point, with her daughter Katie. NPS photo H23.

For over a hundred years the summer season of fishing has meant that some members of the family might depart to participate in commercial fishing in Bristol Bay. Ellanna and Balluta point out that up to World War II, it was mainly men and boys who fished commercially. Eventually, young women also joined this migrating work force, primarily to work in canneries. This outflow of some family members to paid work opportunities meant that women were more likely to take on full responsibility for the work at the summer fish camps, with help from children and elderly family members (Ellanna and Balluta 1992:150). On their return in early August, men and older boys would return to contribute to the remaining work of the fish camps.

Traditionally, people would process fish for themselves, and also for their sled dogs. It was necessary to put up enough dried fish to last the dogs for the winter, which meant a tremendous amount of additional work. Typically, dried fish backs (*k'iyitin*, backbones) were fed to dogs. In the early decades of the twentieth century, fish were put together in bundles of forty, as an easy unit of trade. Ellanna and Balluta noted that even in the early 1940s, although territorial regulations prohibited the practice, some Dena'ina men put up fish to sell to traders instead of traveling to Bristol Bay to sell their fish (1992:151).

Photo 26. Jack Kinney's fish camp on the north side of Iliamna Lake. Kinney was a non-Native miner whose wife was Dena'ina (Branson 2003:156). NPS photo H724.

Dena'ina people developed ingenious ways to use the many parts of fish. To extract oil from the heads of the fish, they left them in water for a few days to get somewhat bloated, and then heated them to render the oil. Some fish or fish heads were stored in underground cache pits lined with birch and spruce, or grasses and fireweed. The cache pit method was possible due to particular ground temperatures. When the fish salting techniques were introduced after the 1880s, the Dena'ina included this as part of the suite of fish storage possibilities (Ellanna and Balluta 1992:151; see Dena'ina Fish Cache video). The main fillets of the salmon were dried or smoked in smoke houses right at the fish camp. The back bones were dried or smoked for the dogs. Some fish were stored in underground cache pits as well, in which they would become slightly fermented (Townsend 1970:7). The fish eggs were eaten fresh or dried and used in soups in the winter. Even the fish hearts were saved and made into a special soup.

Fall Hunting (*Tunch'edaf*) and Fall Fishing

> After we put everything—fish—put everything away, come up [to] the village. Then we'd go up on the mountains and hunt for caribou and everything....Fall time we go up the Kijik. Everybody go up the Kijik fall time just like spring time. Put up the fall fish. That's what they call *nudelvay.* Everybody put up that thing [in September]. (Pete Koktelash 1985)

Photo 27. This 1898 photo of a fish camp at Old Iliamna Village at the mouth of Iliamna River shows many of the elements of an active camp: different forms of watercraft, two kinds of salmon drying racks (both long rails and the tree type more typical of the Iliamna area), and a smokehouse and shelter. NPS photo H978.

> Around the beginning of October, people would establish fall fish camps near prime salmon spawning areas to harvest and dry "fall fish." Bright red spawning salmon were caught using barbed spears (*tuqesi*) then eaten fresh or split and dried (*nudelvegh*). Fall fish were considered a delicacy and preferred by many older people because the flesh does not have the high oil content of fresh, bright salmon and is easier to digest. Pre-spawning fall females were filleted with the backbone, guts and eggs left intact and dried. Fall fish were also dried whole, allowed to freeze (*dunaltani*) and used as food for people and dogs. (Stickman et al. 2003:11; see also Behnke 1978, 1981, 1982; Ellanna and Balluta 1992)

After the summer camps were all packed up, and all of the processed salmon stored or carried back to the village, people would prepare to go to the fall hunting camps. There, they would set up temporary shelters for the period of hunting or trapping.

The presence of large animals in the area is a result of shifting migratory patterns which can be influenced by grazing and foraging availability and, by extension perhaps changes in climate and habitat. Historically, caribou herds migrated through the region that is now Lake Clark Park and Preserve. Archeologists have found evidence of hunting sites and

Photo 28. Birch bark is used to smoke salmon for a particular flavor at the Robert Standifer, Jr. fish camp along Beshta Bay southwest of Tyonek. Karen Gaul photo.

game look-outs on bluffs with advantageous views, or in proximity to caribou travel routes (Tennessen 2006). Alex Trefon noted that caribou numbers increased in the 1930s (Alex Trefon 1985). Moose only moved into the Lake Clark area in the early to mid-twentieth century (Lutz 1960). They became a primary source of meat for Dena'ina hunters. In recent years, Dena'ina residents have noted that moose populations are dwindling in hunting areas where they've been found in the past (Stanek et al. 2007; Nondalton group interview 2004).

In the Lime Village area, people reportedly preferred fresh meat to fish. Moose and caribou were the primary sources of meat, but people also ate beaver and black bear, hunting porcupine and sheep less commonly in recent years than previously (Russell Kari 1983:77-96).

Photo 29. Black bear. NPS photo.

In the past, as mentioned above, Dena'ina built caribou fences to direct the animals into snares. Steve Hobson describes this process:

> They'd make a gate [in a caribou fence] all the way across
> the big valley they call *K'ak'a.*
> After the ground freezes, then they'd set snares.
> After they set snares when it's cold out, the caribou migration gets up against the fence and just about every hole they have, they have a caribou in the snare.
> That's the way they kill their game,
> and then they take it back to their village
> by pulling the sled [themselves] by their neck.
> It was a sled that had a bend on both ends....
>
> The snares look like they were made out of caribou sinew.
> They'd make them about as thick as my finger.
> They'd get damp in the wintertime and get all springed out.

They'd get out of shape.
When they put it over the poles, this is a little stick about that long,
On the end of those snares, that's a toggle.
So they put it over and they got a loop there
And they put that stick across
And they'd pull on it; it's already set.
That's smart.
That (sheep snare) is the same as the caribou snare.

Then they (also) corral the caribou and round them up and
Chase them in the water
And then they kill it with a spear, and kill what they want.
(Steve Hobson 1981, Ti72(2))

Some of the meat derived from fall hunts was eaten fresh, some dried, and some placed in raised or subterranean caches. Following the fall hunt, people would often come back to the village to regroup before setting off again to fall trapping areas. "After that, we came down in the late evening October month, along in September, all coming down to Old Village to stay for the winter" (Pete Koktelash 1985).

Fall Trapping *(Naqeliteh Ch'k'ezdlu)*

While trapping was a significant fall and winter pursuit in the past, it has not retained the same degree of importance that fishing has as a contemporary subsistence activity. Some people still trap, but elders have lamented the fact that young men aren't learning the skills to trap anymore. In the past, people would travel with dog sleds in various combinations—sometimes in groups of men, other times as families with children—into trapping camp areas. They would need to bring provisions for everyone in the camp, including food for the sled dogs. Pete Trefon recalled that for trapping, people needed to go "Early, before the snow gets too deep," or else later in the winter, after the days start lengthening again. "Trap those short days, you can't go that far on those short days" (Pete Trefon 1975). Trap lines ran around 25-30 miles long, and were run with the aid of a team of 7-9 sled dogs (Ellanna and Balluta 1992:166).[28]

Use of trapping sites was based on usufruct rights passed from father to son. Ellanna and Balluta noted that trapping areas for Dena'ina in the Nondalton area included:

> Miller Creek...Owl Bluff (*Kijeghi Tsayeh*), *Qałnigi Tunilen*; *Chaq'ak Tuget*, a bay on Lake Clark across from Tanilen Point; Lynx Creek; and Nikabuna Lakes....Some trappers...ran trap lines along the Telaquana Trail. These trappers normally had trap line cabins at K'a Ka'a, a valley on College Creek; Snipe Lake (*K'adeła Vena*); Denyihtnu, a canyon on the Mulchatna River; and Telaquana Lake. The upper Stony River Dena'ina traveled into the headwaters of the Swift River or to the Hoholitna River for trapping and hunting from tents during this time of year (Ellanna and Balluta 1992:166; see also Russell Kari 1983).

Pete Trefon described trapping for fox and wolverine from Turquoise Lake on down to Lake Clark (Pete Trefon 1975).

People in the Lime Village area remembered that a group of families on several sleds would travel into the Swift River area, splitting up and spreading out once they reached Swift River. "Each trapper would put his own special mark on a tree along his trapping trail to designate his use of the area" (Russell Kari 1983:96). Lime Village residents also trapped in the Tishimna Lake region, Hook Creek, Caribou Snare Creek, and the Little Underhill Creek region (Russell Kari 1983:97).

[28] Russell Kari (1983) records longer trap lines of 30-60 miles.

Photo 30. Charlie Roehl with fox furs at Seversen's Roadhouse. NPS photo H609.

In the early part of the trapping season, people were after fox, lynx and marten, as well as weasels and wolverines. These animals were trapped and skinned for the value of the fur, and usually not eaten.

In the Nondalton area, people remember that women and girls sometimes drove the dogsleds to trapping areas and were competent in snaring hares and ground squirrels, and hunting for spruce hens and grouse. They also contributed to daily subsistence through ice fishing, preparing food, repairing clothing and in maintaining the camp in many ways (Ellanna and Balluta 1992:166). Snares were made from the pliable stems of eagle feathers, with sinew for the string, and a piece of wood to hold it. Snares for smaller animals were not unlike the caribou fence in concept and design. Antone Evan recounted that women used to make hundreds of snares and pack them in a bag. Once up in the mountains, they'd put twenty or so on a cane, and go looking for squirrel dens or holes, where they would set the snares (Antone Evan 1981, Ti72(5)).

*Photo 31. Dena'ina women hunted arctic ground squirrel (*qunsha*) with snares. The fur was used for undergarments and mittens, and sometimes sewn into parkas, thus its nickname "parky squirrel." Evanoff family snares photographed for NPS by Fred Hirshman.*

Men from the Nondalton region traveled further out from the camp to set trap lines. The women and girls provided small game and fish for the trappers to eat fresh on site. This food supplied much of the daily diet for those staying at the trapping camps, and reduced the need to pack food or store it in caches. In the Lime Village area, in the early 1980s, Priscilla Russell Kari found that while women occasionally accompanied men on trapping trips, they would usually trap closer to home, and care for the young and elderly (1983:96).

Mary Ann Trefon described a rabbit snaring brush fence, which functioned much like the caribou fence and snare system, on a much smaller scale:

> They'd make it real long.
> They'd leave a hole at various lengths
> And they'd put snares there.
> They'd let it go until the next day
> And when they looked at it the next morning,
> they'd probably catch 10-15 rabbits.
> And then they'd take it out of the snare and take it home.
> They'd preserve it; they'd skin it and of course cook some of it
> and then the rest they'd hang outdoors.
>
> For ptarmigans they'd do the same thing;
> They'd make a brush fence, and put holes in it
> And put a snow-made ptarmigan, like a decoy, on the brush.
> A lot of ptarmigans would land alongside of that brush fence,
> And they'd start eating the buds of the brush.
> Between them there are the holes where there are snares,
> And the ptarmigan would get in the snares.
> Sometimes a strong ptarmigan would pull up on a brush
> and start flying away with it.
> When the ptarmigan flies away with the brush,
> then that's when we'd start chasing it like a foot-race.
> (Mary Ann Trefon 1981)

Winter Camp *(Huch'ghinu)*

Prior to the influence of the Russian Orthodox Church, winter months were, for the Dena'ina, a time to interact socially. This occurred through potlatches, which were often memorial feasts for the dead. Following the integration of the Russian Orthodox religion into Dena'ina lifeways, the annual round of events were punctuated by religious holidays such as Russian Orthodox Easter and Russian Christmas (Ellanna and Balluta 1992:140). A return to the village for these religious celebrations marked a break between different camp periods. Many people throughout the region would make their way back to home villages for the celebration of Russian Orthodox Christmas in mid-January.

After this break, people would shift to winter camps to trap beaver and continue to hunt other game. People did eat beaver meat, and also sold the pelts for cash. Ellanna and Balluta noted the importance of beaver for the Dena'ina, especially during the height of trade through the Russian American Company:

> Beaver was perceived to be one of the most important animals taken by the inland Dena'ina. Not only did they provide an essential source of fatty, rich food, but they also provided pelts important for clothing, including caps, gloves, lining, trim or...entire outfits. Since the onset of the Russian American Trading company trading

Photo 32. Betty, Linda and Hilda Cusma holding beaver pelt stretcher. For many, trapping was a family activity, with entire families moving out to trapping camps and contributing to the work of trapping, subsisting, and maintaining the camp. NPS photo H545.

> in the Cook Inlet and Lake Iliamna areas, and until fur prices began to fall after World War II, beaver trapping provided an important means by which people obtained trade goods, or, in more recent years, cash (Ellanna and Balluta 1992:148).

The reduction in beaver trapping in recent years has meant an increase in beaver populations. Currently at about $20 per pelt, beaver furs are no longer a lucrative source of income. Stickman and others noted that in the Nondalton area, increased numbers of beaver means the animals dam up more rivers, and the dams can inhibit salmon runs (Stickman et al. 2003:32).

Furs acquired by trapping were sold at trading centers for cash income, which was then used to buy provisions which could not be hunted or gathered locally. Alternatively, some of the furs were kept for fashioning clothing that could be worn, traded, or sold (Russell Kari 1983:97).

Nondalton residents used winter camp sites located along the Mulchatna River, along the Chilchitna and Chilikadrotna Rivers and Ptarmigan Creek, the Chulitna River, Black Creek and other areas (Ellanna and Balluta 1992:170-171). Upper Stony River residents trapped for beaver on the upper Swift and Hoholitna Rivers (Russell Kari 1983; for a detailed description of beaver trapping practices, see Ellanna and Balluta 1992:171).

Moose and caribou were also sometimes taken at this time of year. Ellanna and Balluta recorded that prior to the introduction of steel traps and snares, Dena'ina of the area would take hibernating black bears, occasional moose, and small animals such as hares, porcupines, and ptarmigans in the winter months (Ellanna and Balluta 1992:171).

Gathering Plants

Dena'ina have long used many different kinds of plants for food and medicinal purposes, wood for firewood and construction of homes and implements, and mosses and fungi for multiple uses. Fortunately, for the Lake Clark area, some good studies of plant use have been completed and are available. *Tanaina Plantlore/Dena'ina K'et'una: An Ethnobotany of the Dena'ina Indians of Southcentral Alaska* was compiled by Priscilla Russell Kari, published in 1987, and reprinted in 1995. A few years later, a study entitled *Subsistence Uses of Vegetal Resources in and around Lake Clark National Park and Preserve* was completed (Johnson et al. 1997). These important resources should be consulted for detailed information on plant-related knowledge and use in the region. The brief summary here only suggests the range of ingenious uses of the living plant world that the Dena'ina have developed over hundreds or thousands of years. These plant resources, like the fish and animals that are used for subsistence, medicinal and/or symbolic purposes by the Dena'ina must be recognized as ethnographic resources.

Berries are the most important of the plant resources consumed by Dena'ina people in the past and today. Many berries become ripe during the fishing season of the summer, and people would gather them in the areas surrounding the fish camps. Although men, boys and girls would also contribute to gathering berries, bark and other materials, women were the primary plant pickers and processors, while men usually stored up firewood and crafted items from wood (Ellanna and Balluta 1992:201).

Berries are also the most plentiful of wild plant food sources. A plant use survey for the Lake Clark area by Darryll Johnson and his colleagues found that people throughout the region harvested fifteen different species. Of these, a handful of species were harvested by the majority of the households (Johnson et al. 1997:341-342). The alpine blueberry and bog blueberry or bilberry (*Vaccinium uliginosum*) are most common. Both are species of blueberry, but some of the Dena'ina call these two varieties by different names (Russell Kari 1995:63-64). The Upper Inlet Dena'ina call all blueberries *gega*, or *ts'ingek'a* meaning "straight berry" in the Iliamna dialect, whereas Inland Dena'ina call the larger berry *giga gheli* "real berry" and the smaller *q'ach'ema giga*, or willow ptarmigan berry. Around 85 percent of households surveyed harvested the alpine blueberry, gathering perhaps 3-5 gallons per season, but occasionally gathering as many as 30 gallons (Johnson et al. 1997:342-344).

Photo 33. Ruth Koktelash picking blue berries near Nondalton. Circa 1975. Photo courtesy of Florence Hick and Doris Hagedorn.

Blueberries were often mixed with lard or seal oil, fish or meat, and sugar to make *nivagi* or Native "ice cream" (called *agudeq* in Yup'ik) (Johnson et al. 1997:344; Russell Kari 1995:60-61). Otherwise, the berries are eaten raw, or are stored in water, layered in sugar, frozen or stored in boxes. They are also processed into jams, cooked with fish eggs, or prepared in many other mixtures.

Lingonberry or lowbush cranberry (*Vaccinium vitis-idaea*) is another berry commonly used throughout the Dena'ina area. In the 1997 plant use study, 79 percent of the households surveyed reported using it (Johnson et al. 1997:344-345). Known as *k'inghildi* (Inland and Iliamna Dena'ina) or *hey gek'a* (winterberry), the berries are harvested after the first frosts in the fall, or in the spring, after the snow melts (Russell Kari 1995:67).

> In the spring in weather like this the snow melts off.
> That's the time they pick winter cranberries.
> They are still real good berries.
> A lot of sunlight dries up those cranberries
> this time of year when the snow first melts off it.
> When the snow fell on it in the fall, it preserved them.
> There are still good berries. (Pete Trefon 1974)

Households harvest several gallons a year, and use them in Native ice cream, pies, jams and jellies (Johnson et al. 1997:344-345). They are also used as "a hotpack for headaches, swelling and sore throats, including tonsillitis" or as a gargle for sore throats (Russell Kari 1995:68). High bush cranberry (*Viburnum edule*) is also a commonly used berry throughout the inland Dena'ina region. This is a sour berry, and it is called *łtsunłtsa* or *ełtsuntsa* in Dena'ina (Johnson et al 1997:349).

Blackberries (*Empetrum nigrum*), also called crowberries, are called *gigazhna* by the Iliamna and Inland Dena'ina, *gegay*na or *giyna* by the Upper Inlet Dena'ina, and *dghilingek'a* by Outer Inlet Dena'ina. In the Nondalton and Newhalen areas, people reported harvesting large amounts of blackberries, with some families gathering ten to fifteen gallons or more in a season (Johnson et al. 1997:347-348). The berry is eaten in a variety of ways, and used for medicinal purposes as well (see Russell Kari 1995:78-79).

*Photo 34. Crowberries or blackberries (*Empetrum nigrum*) are known to Inland and Iliamna Dena'ina speakers as gigazhna. The leaves and stems of this berry are used as medicine for digestive problems. The red berry is lowbush cranberry (*Vaccinium vitis-idaea*) known as* K'inghildi.

Salmonberry, low bush salmonberry, or cloudberry (*Rubus chamaemorus*) is also commonly used in the region. Salmonberry is called *nqutl'* in Dena'ina, and looks a bit like a yellow-orange colored raspberry. In the past, these were commonly stored in animal fat, as were all the other berries. These can spoil quickly, however. They are also made into jam or Native ice cream.

Other berries gathered in smaller quantities in the area are northern red currant (*Ribes triste*), wild rose or prickly rose (*Rosa acicularis*), red raspberry (*Rubus idaeus*), nagoonberry (*Rubus arcticus*), northern black currant (*Ribes hudsonianum*), high bush salmonberry (*Rubus spectabilis*), bog cranberry (*Oxycoccus microcarpus*) and others (Johnson et al 1997:351-352).

Berries were and continue to be an abundant source of nutrition and an essential supplement to a diet heavy in meat and fish. Although berries were gathered and stored in larger amounts, there were other sources of plant food in the Dena'ina world. Numerous "roots, shoots, stems, leaves, buds, flowers, and sap" are also used for food or medicine. Some lichens and mushrooms, for example, are traditional foods, while certain berries, fungus, and mosses are valued for their medicinal qualities (Johnson et al. 1997:333-334). Most of these plants are harvested in the summer and fall.

In addition to berries and other edible and medicinal plants, Dena'ina people used tree materials for countless purposes throughout the year. Transforming the very forests around them into cultural objects, the Dena'ina fashioned shelter, tools, transportation and all sorts of useful devices from wood and branches.

Spruce trees, for example, are found throughout the region. The three species are white spruce (*Picea glauca*), black spruce (*Picea mariana*) and Sitka spruce (*Picea sitchensis*) (Russell Kari 1995:28).

> Spruce is the single most important plant to the Dena'ina because of the many uses they have for it. The fact that the Dena'ina name for spruce, *ch'vala*, or a variation of it, is also the name for "tree" signifies the value of the spruce to the Dena'ina. (Russell Kari 1995:28)

The Dena'ina discern different types of spruce wood according to color and hardness, and use these various kinds of wood for different purposes (Russell Kari 1995:28-29). The hardest and darkest wood, *ggek*, was used for things like "sleds, shafts of hunting spears and lances, digging sticks, shovels, fire drills, tongs for moving hot rocks, and splitting wedges" (Russell Kari 1995:29; see also Osgood 1937). *Dehzila*, a more dry and light spruce wood from a faster growing tree, was used for drums, dishes and arrows and sometimes boat ribs. *Ch'ik'dea* is of a medium color and hardness, often growing in mossy damp places. This type of spruce wood was also used for drums, as well as for boat ribs, paddles, and poles (Russell Kari 1995:29).

Spruce wood is also used for dozens if not hundreds of other purposes. Logs were and are used for houses, caches and steambath houses. Dena'ina winter homes, before the arrival of Russians, were semisubterranean, with about half the wall built beneath the ground. Above the ground, log walls were typically banked with sod, and the roof was sod-covered as well. After interaction with Russian trappers and traders in the area, the Dena'ina built their log homes completely above ground (Johnson et al. 1997:307). Small-diameter poles are used to construct smokehouses, sheds, rafts, drying racks, and fish wheels (Russell Kari 1995:28-29; Osgood 1937:55-66; for more on house construction see Johnson et al. 1997:307-330). Many other hand tools such as knives, hammers, bows and shovels were fashioned from spruce wood (Russell Kari 1995:28-29).

Different kinds of wood were burned for particular results. Rotted wood, for instance, was used in slow-burning fires for tanning moose skin or mixed in water to dye the hides (Russell Kari 1995:30). In addition, there were multiple uses for sap, bark, cambium (the inner bark), branches, roots, needles and cones. (For a nicely detailed description of these uses, see Russell Kari 1995:30-35).

Photo 35. Helen Dick of Lime Village harvests birch bark for making into baskets. Karen Stickman photo.

Similarly, the birch tree, abundantly found in the inland Dena'ina region, has been used in countless ingenious ways. The wood is used for smoking fish. Its hardness makes it appropriate for construction of a number of essential items for Dena'ina, especially in earlier times, such as "snowshoes, sleds, boat frames and ribs, bidarkas, bows and arrows, spoons, dishes, handles for tools, mauls, sledges, and sunglasses" as well as drum frames and fish traps (Russell Kari 1995:42).

The bark from birch trees is, of course, extremely valuable for constructing baskets, cups and other vessels, a trademark craft of the Dena'ina. The birch bark baskets could be used for many purposes, including for boiling water and cooking.

> Before using this method, the Dena'ina sometimes warmed the ground with a fire and partially buried the basket, so that its contents would heat faster. To boil water in a birchbark basket, the Dena'ina first heated some hard rocks until they were very hot, and then they dropped them into a basket filled with water…When the rocks cooled off, they were removed from the water with tongs, and more hot rocks were added, this process being continued until the water boiled. To cook food, the Dena'ina turned another basket upside down over the first one in order to utilize the steam. (Russell Kari 1995:46)

Russell Kari noted that birch bark has also been used for baby cradles, hats, canoes, and roofing materials or tents (Russell Kari 1995:43-45). The bark was sometimes stitched together to make a tarp-like covering used for temporary shelters while people traveled (Russell Kari 1995; Johnson et al. 1997:310). Later, Russians introduced canvas tents, and these eventually replaced the birch tents. Canvas tents, especially double-walled ones, are still used today, sometimes for long term living.

Fuel wood is necessary throughout the winter for many purposes: for warmth, for traditional steam baths, for smoking fish or game at various times during the year, and, more so in the past than now, for cooking. Firewood is gathered throughout the year (Behnke 1982:29; Johnson et al. 1997:163-305).

Crafting from Natural Resources

In addition to the more immediate uses of fish, animal and plant resources for food, medicines, shelter, and transportation, the Dena'ina used materials from the natural world around them to fashion necessary equipment, clothing and other items. They used bone, stones, plant fibers, and minerals in ingenious ways. This complex combination of uses for plant and animal materials meant that the Dena'ina did not waste much at all. Almost all parts of a fish or animal were used. Fish skin was used to make boots, or containers in which to store fish oil. Animal

Photo 36. Gardens were an important source of winter and summer foods once they became more settled into long-term villages. In this 1915 picture taken at Tanalian Point, Agafia Trefon and another girl hold up massive rutabagas, which will last throughout the winter in root cellars. NPS photo H10, Agnes Cusma collection.

intestines were opened up and stitched together for waterproof jackets. Ground squirrel furs were sewn into coats, mittens and undergarments. Remaining entrails and bones were typically put back into the water or burned, to facilitate the animal's return to another life (Boraas and Peter 2003).

Antone Evan described a technique he remembered for making spears for caribou and bear hunting out of caribou bone:

> Caribou shin was better than other bone because it is harder,
> with a wooden pole, about six feet long is good enough.
> All those spears, they don't make them longer than six feet long.
> Even a brown bear spear is about six feet long, I've seen that.
> The brown bear spear is wider, and a little bit longer.
> The caribou would be smaller—didn't have as big as this one.
> It's shaped like this, sharp on both sides.
> Just about as long as the caribou shin bone,
> and they'd saw it right in half and made two spears out of that.
> That's hard.
> (Antone Evan 1981, Ti72(2))

Stone spear points, Antone Evan continued, are made out of copper rock, or blue rock (*Tsatl'ech' qałnigi*), which is "the hardest rock there is for bear and caribou spear heads." It is obtained from:

> ...way over on the other side of Stony River. There's a whole mountain that's like that, with big rocks...*Hutał Dghil'u*....They'd boil the fat and render that oil out and ...they'd boil the rock in oil. Then they don't chip. It's the same as steel then, if you make it hot enough. It won't chip anymore. ...
> You can sharpen them as sharp as knives. (Antone Evan 1981, Ti72(2))

Because they traveled so much, people developed technologies to facilitate travel and comfort. For basic backpacking, and carrying their loads themselves, Dena'ina simply tied their bundles with a rope. Anton Evan said that both men and women would brace their load against a stick. "They used to have a stick across their chest called *hał duten*...They used to call that a packboard or a packstick." Men used a narrower stick and women's packsticks were wider, often carved with beautiful, intricate designs. Antone Evan also described tools and materials used for making sleighs and snowshoes (Antone Evan 1981, Ti72(5); for a detailed description of snowshoe construction, also see Osgood 1937:79-83).

> The snowshoe, before they started weaving it,
> they drill holes in the front of it.
> They weave it around with sinew string.
> They have a little special drill to drill holes with,
> that's in our language called *nitsexi*.
> That's a small drill.
> That drill was for small work.
> The sinew string they used to make,
> they used it for tying the snowshoe together
> Out in the end of it they called *shex tl'ił*,
> a special woven sinew string.
> A small narrow strip, rawhide make out of caribou skin,
> in our language called *ush ghetl*....

For the foot part of the snowshoes,
they use a bigger and stronger rawhide

To weave the foot place of the snowshoes,
they weave it with that.
When they build the snowshoes and bend them,
they don't bend them too much.
They bend them just so much, very little.
When they get too much bend in the snowshoes,
and when they start wearing them and start running in them,
the snowshoes start hitting their knees.
That's why we don't bend them too much out on the end
(Antone Evan 1981, Ti72(5))

Peter Kalifornsky described the technique of steaming wood for sleds and for snowshoes.

> The Dena'ina used to steam wood. They used to steam wood for snowshoe frames. First, they wrapped cloth around the wood and they poured boiling water over it. Then they let it soften in the steambath house. Before they used cloth, they probably used moss. (Kalifornsky 1991:227)

Kalifornsky noted that before they began to hitch dogs to sleds, people would just use a skin to wrap meat inside, and drag it along. They used dogs for hunting, but not with sleds (1991:229-231).

To protect themselves from the cold temperatures of interior Alaska, Dena'ina fashioned clothing, mittens and boots from the hides of the animals they hunted. Tanned caribou or sheep skin was used for a soft undergarment that extended from the neck to below the knees. A skin shirt was worn over this in the summer. Fur was left on the skin for winter wear and people wore hooded parkas and boots made of caribou or sheep skin with soles of brown bear or beluga (Townsend 1970:8). Beads, porcupine quills, dentalium shells and other materials were used for decoration. For sewing the clothing, and as an example of one of the more ingenious materials used, Emma Alexie described a naturally found sewing needle:

> They use a little marten penis, it has a little bone inside, and it also has a little hole in it; they use that, they shape it into a needle and use it to sew, they use it for all kinds of sewing. And they make dresses and jackets and when they get done with it they wear it. (Emma Alexie 1981, Ti73(1), side B)

Townsend noted that people of the Iliamna area wore earrings and labrets, as well as ornamental shells inserted in the pierced nasal septum. They tattooed their faces, and occasionally painted them with red and black face paint (Townsend 1970:8). The coloring for the red face paint may have come from a red ochre known as *chish*, which was collected from a few known spots. Like those plant, animal and fish resources drawn upon for subsistence needs, the natural materials used for decoration and clothing were all ethnographic resources.

Sedentarism and Centralization

Despite the amount of ground they covered in the course of seasonal hunting, gathering and fishing, and temporary stays in various fish and hunting camps, Dena'ina people maintained relatively stable and long-term permanent homes clustered in village settlements. As mentioned above, these homes (*nichil*) were semisubterranean, with floors dug out a few feet below the surface of the ground, and walls of log built a few feet above ground, allowing condensation to breathe out of the house. Moss was used as insulating chinking between the logs and around windows Roofs were constructed of wood and sometimes moss covered as well.

These semi-permanent settlements shifted to new areas when resources, environment, or social reasons led people to new areas:

> ...[C]hanges in local ecological conditions, such as diverted river channels, fluctuating beach levels on a lake, or the availability of a particularly important animal species, encouraged resettlement. Additionally, an unusually large number of human deaths at any point in time, warfare, the depletion of proximal resources such as firewood, the overall quality of a settlement site after years of occupation, or modification in the seasonal cycle as a result of cultural factors stimulated the relocation of communities. (Ellanna and Balluta 1992:58)

Like other previously mobile northern indigenous peoples, the Dena'ina settled into larger, more centralized, and more permanent villages in the postcontact period (Ellanna and Balluta 1992:53). Following Euroamerican contact, Dena'ina migratory patterns, which had been directed by resource availability and shaped by the seasons, changed fairly rapidly. By the late 1800s, a shift in settlements closer to trade centers was under way. People had become accustomed to using staples such as flour, sugar, tea, and coffee, and wanted to minimize the time and distance it took to travel for trade.

> By the first decade of the 1900s, some centralization of the inland Dena'ina had occurred. The Mulchatna band had dispersed, with its populations settling primarily in Kijik but also at Telaquana and on Stony River at *Qeghnilen.* In the first decade of the 1900s, the residents of Kijik began and completed their relocation to the site of Old Nondalton. Subsequently, the Telaquana band resettled at Old Nondalton, with the exception of the large family of Trefon Balluta, who established their home at Tanalian Point. During these early years of the 1900s, many people moved to the Lake Clark area from *Qeghnilen*, primarily, Nondalton elders said, to be closer to trading posts and the Bristol Bay fishery. A school was established in Old Iliamna in 1908, although few inland Dena'ina attended. (Ellanna and Balluta 1992:76)

Pete Koktelash echoed the point that accessibility from the interior northwest villages of the region became a concern:

> Same way as Stony River—Lime Village—good village, good place but hard to get the groceries a long time ago. Same way as Mulchatna, that's why they all moved down here.... (Pete Koktelash 1985)

However, inland Dena'ina shifted to centralized, sedentary locations for more than just reasons of proximity to trade resources. As described in Chapter 3, the institution of schools, and emphasis on education of children meant that families became more sedentary, traveling less to hunting, fishing and trapping grounds so that children could attend school. Oral traditions offer accounts of people abandoning certain areas due to loss of resources, political clashes, illness and death, a spiritual unsettling, or any complex combination of these things and more.[29] Pete Koktelash, for example, described why people left Kijik:

> Oh just people died in one year over there—lots of people...almost died, about 20-30 persons died in one year. And then they had no priest. Before they had a priest down in Nushagak. (Pete Koktelash 1985)

Even without the disruption and trauma of epidemic illness, settlement was a difficult transition to make for a people whose "home" was a vast extensive area of hundreds of square miles. Dena'ina people today say that they constantly long to get back out into the greater areas around their village settlements. In the 1980s, elders in Nondalton thought that the greatest sacrifice their people had made as a result of western contact was to give up their mobility (Ellanna and Balluta 1992:310). The mobility that defined Dena'ina people for so many generations had been altered, and their identity altered with it.

[29] For a more detailed discussion on the relationship between centralization and sedentism in hunting and gathering societies, and how the Dena'ina pattern fits in with other hunting and gathering groups around the world, see Chapter 4 in Ellanna and Balluta, "Inland Dena'ina Demographic Change: Population Shifts, Sedentism, and Euroamerican Contact" (1992:53-97).

Reindeer herding, introduced during the first decade of the 20th century, was another commercial industry to which Dena'ina were exposed, as part of the missionary educator Sheldon Jackson's plan to draw Alaska Natives into a new economic pursuit. The Dena'ina had long hunted caribou, the wild counterpart of the domestic reindeer. The following essay addresses some of the implications of reindeer herding for Alaska Natives, particularly the Dena'ina in the Lake Clark area.

Reindeer in Alaska

Caribou and reindeer are basically the same species of ungulate. This fact makes the question all the more perplexing: Why, if caribou were plentiful throughout Alaska, would the government make a concerted and expensive effort to import reindeer from Siberia?

Perhaps the shortest answer is that reindeer were domesticated. Herding techniques used by Samis, a number of whom came over to supervise the herding, were taught to Inupiat and Yup'ik groups in the Seward Peninsula area (Ellanna and Sherrod 2004). The reindeer herding program throughout Alaska was initiated by Sheldon Jackson, the General Agent for Education in Alaska from 1892-1906. He was also very influential in the construction of village schools throughout the region. As a Presbyterian missionary, he saw a need for economic development in the Seward Peninsula area and elsewhere. The reindeer development program and educational initiatives went hand in hand. Reindeer were first brought to this region in 1892 to provide an economic development opportunity for Native communities of the region. This was initially to provide a subsistence resource for Native peoples who were experiencing economic hardship. Expanding reindeer herds became an important source of meat for growing mining operations on the Seward Peninsula around the turn of the century. By 1905, there were more than 10,000 reindeer in Alaska, and the Board of Education had established 15 reindeer stations in the territory (Unrau 1994:309).

The Lake Clark/Iliamna reindeer herds were actually brought to the region unintentionally. In 1904 Hedley Redmyer, a Norwegian Lapp, attempted to bring 300 deer overland from the Bethel area to Copper Center, north of Valdez. Redmyer reached Iliamna Lake, and attempted to move the herd through the Lake Clark area and over the pass to Tyonek. Lack of moss for feeding, steep terrain, potentially deep snow, and the threat of wolves forced him back to the Iliamna area, and he set up a station at Kokhanok, on the southeast shore of Iliamna Lake. Redmyer's deer became the forebears of all the other reindeer herds in the Iliamna and Bristol Bay regions (Unrau 1994:311; Branson 1997:96).

Several reindeer stations were set up and Native apprentices were hired and trained. Apprentices would receive a number of deer after each year of satisfactory service, slowly building herds of their own. After four years of training, an apprentice could become a herder on his own, and in turn train others. Because the government provided rations for the apprentices, single young men were preferred. At Iliamna, though, in many cases they had to hire married men and to "support their entire families in order to get them to remain," thus increasing the expense of running the program (U.S. Bureau of Education 1909).

Interestingly, while the reindeer herding program, based on the Sami model, required constant travel with the herds—more than the Dena'ina would have engaged in for normal subsistence practices—the school program encouraged the usually mobile Dena'ina to become more sedentary. The young male apprentices, whether married or not, would have had to travel for quite some time and distance from their families. Additionally, many of the lead herders—perhaps Yup'ik or Inupiaq, often referred to as "Eskimos" in historic records—traveled to live for long periods in regions far from their own homes. This was very challenging for people used to living in close relationship with their families and communities.

Reindeer herds were divided, relocated and shuffled around in the first few decades of the 20th century (Unrau 1994:310-314). Numbers of reindeer in these herds of the Bristol Bay region were at around 6,000 in 1920, and up to

approximately 14,000 just three years later (Unrau 1994: 314). In his journal entry on August 7, 1921, Col. A.J. Macnab casually noted that in the day's travel they "pass a herd of several hundred reindeer on the edge of [Iliamna] lake" (Branson 1997:28).

Ellanna and Balluta noted that the introduction of reindeer in the inland Dena'ina area affected the people of Iliamna more than it did the Nondalton population. According to those authors, those Nondalton residents who reported using reindeer meat, hides, and horns were usually people who had formerly lived at Iliamna (1992:28-29). Some Old Iliamna and Old Nondalton men herded reindeer at Eagle Bay Creek in the early 1900s.

Eventually, in the Iliamna area, it was impossible to keep dedicated herders out with the reindeer. By 1936 the herds began to decline. A combination of factors contributed to a larger pattern of reduction in herds throughout the state. In the state-wide context, the herds eventually became too large for the market to absorb, with the overall count of reindeer in Alaska reaching to around 600,000 (Lantis 1950, quoted in Ellanna and Sherrod 2004:187). Additionally, overgrazing due to expanding herds became a problem. There was an increase in wolf predation, but this was paralleled by an increase in numbers of reindeer as well. These problems, as well as disease and other factors, led herders from both the Seward Peninsula and the Iliamna area to abandon their herds (Little 1963:14-24; Ellanna and Sherrod 2004:189). In the Iliamna area, according to a teacher at the Newhalen school in 1937, pay was low compared to what men were earning in the Bristol Bay fishing industry. By that time, local people had plenty of available sources of meat without having to keep a herd of reindeer (Unrau 1994:316-317). The isolation and long-distance travel were no doubt difficult for the Dena'ina and Yup'ik herders to sustain. Perhaps the logic and momentum of traditional subsistence practices persisted in the face of this intended economic development project. By 1938 the reindeer from the Iliamna area had been transferred to other herds or had dispersed among indigenous caribou herds, joining their distant cousins after millennia of separation.

Survey Research
By Don Callaway

Considerable social, economic and subsistence data exist for the Lake Clark region. The Alaska Department of Fish and Game, Division of Subsistence (ADF&G) has conducted numerous survey research efforts in this area, either as part of its own regulatory responsibility or in cooperation with the National Park Service and other government entities. The following brief narrative provides some basic empirical data on changes in harvest amounts, income, and demography for nine communities in the region. However, this represents only a snapshot of the rich information available for this region.[30]

As Table 2 indicates, prior to 1983 Nondalton and Pedro Bay were the only communities in the region in which the ADF&G Subsistence Division had ever conducted a harvest assessment. Most, but not all, of these assessments ask households the amount they had harvested of each species of wildlife resources during the previous twelve months.

Table 2. ADF&G subsistence harvest assessments by community, 1973-2006

Community	1973	1980	1981	1982	1983	1988	1991	1992	1996	2004	2006
Lime Village											
Port Alsworth					*					*	
Nondalton	*	*	*		*					*	
Iliamna					*		*			*	
Newhalen					*		*			*	
Pedro Bay				*					*	*	
Kokhanok					*			*			*
Igiugig					*			*			*
Levelock						*		*	S		*
Tynonek											*

"*" indicates a harvest assessment conducted.
"S" indicates a harvest assessment for salmon only.

In contrast, as Table 2 demonstrates, since 1983 considerable survey research has been done on subsistence issues. While it is uncertain whether SPSS (Statistical Package for the Social Sciences, a software package used for statistical analysis) files can be provided for time periods prior to 1992, for surveys conducted since then such files are available or will become available as a new wave of studies linked to the proposed Pebble Mine baseline are completed and processed. It is certainly hoped that much of the 1983 information will become available because it would be nice to track the dynamics of the regional situation for several points in time for several communities (e.g., for Iliamna, Newhalen, Kokhanok, Iguigig and Levelock for three different years). Note, however, that this would not be what is statistically termed a "time series" analysis. To

[30] A forthcoming volume (referred to here as "Volume III" of the broader Lake Clark ethnographic project) to accompany both this Ethnohistory of Lake Clark National Park and Preserve and the *Western Cook Inlet Ethnographic Overview and Assessment* (Stanek et al. 2007) will analyze in far more detail the complex relationships among subsistence activities, cultural values, changing technologies and dramatic changes in the regional and local economies.

accomplish this we would need to follow the changes in each individual household over time, a difficult challenge given issues of confidentiality and consent that would impede linking individual households through time. Nevertheless, cross-sectional analysis of communities at different points in time can bring considerable understanding as to important issues such as the impacts of the decline of commercial fisheries to the economy and subsistence practices of local communities.

Demography

The following analysis draws exclusively from population estimates from ADF&G survey research. ADF&G estimates often differ from the U.S. Census in that ADF&G attempts to map and contact every household in the community during their field season. The U.S. Census often employs sampling strategies that are often not as accurate as the ADF&G surveys although a judicious use of the decennial census information can fill in the gaps caused by the ad hoc nature of the ADF&G efforts.

Based on Figures 10-12 and Table 3 one can infer that the community of Iliamna has decreased in size by about half since the early 1980s and its indigenous population has dropped from three fourths to two thirds during the same period. In contrast the nearby predominantly indigenous (97 percent) community of Newhalen increased its population by 20 percent during the decade after 1983 but since 1991 has lost population and now stands at about its 1983 level.

We have more data points for Nondalton where the proportion of the population that is Alaska Native has remained fairly constant at 90 percent. However, Nondalton saw a dramatic increase in population to a high of 289 individuals in 1983 only to see most of these gains lost as the 2004 population of 164 is nearly identical in number to the 1980 population, 168. Pedro Bay has seen only incremental increases in its population but some emigration of non-Natives must have occurred as the proportion of Alaska Native ethnicity has increased during this period.

Figure 10. Number of households in Lake Clark communities over time.

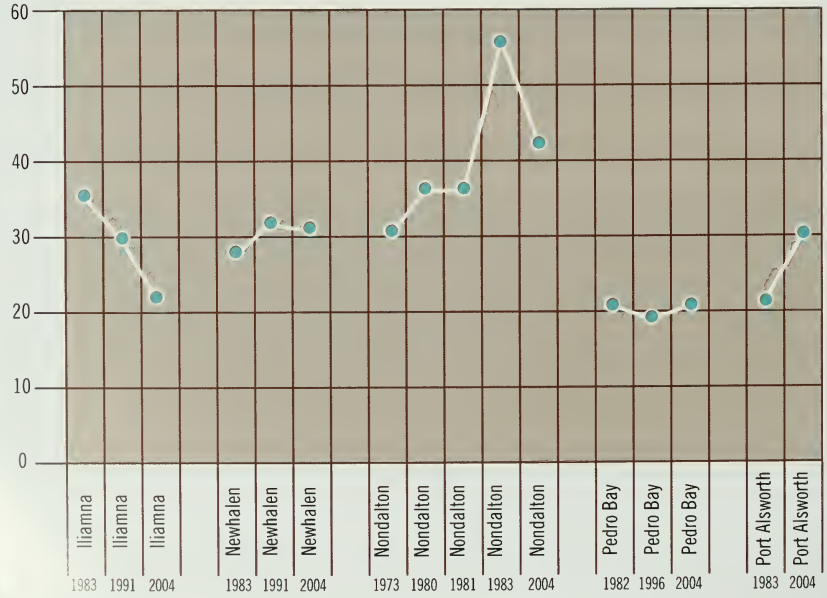


Figure 11. Population of Lake Clark affiliated communities over time.

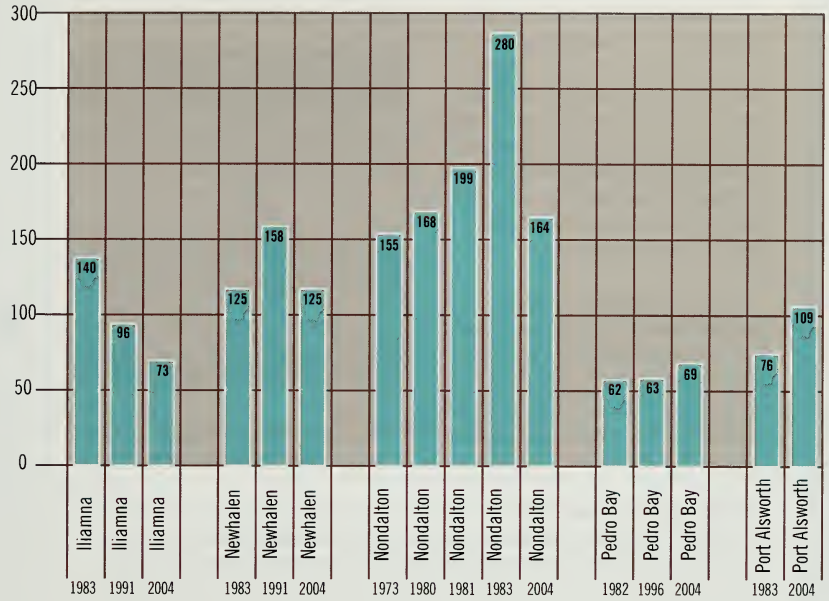
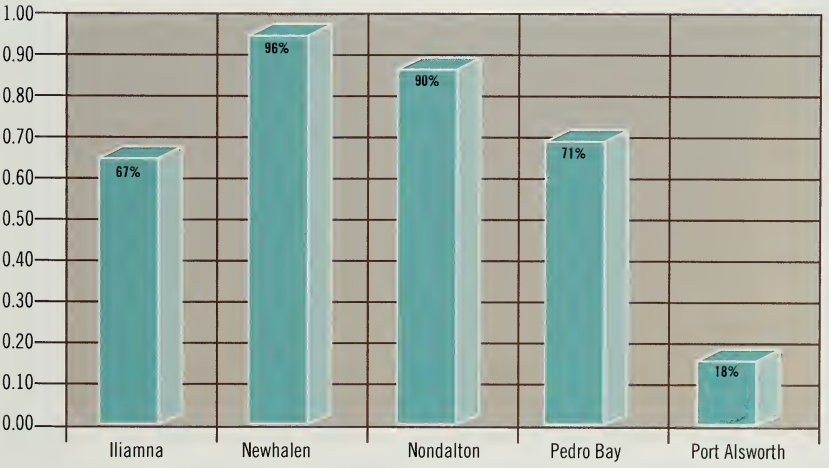


Figure 12: Percent Native ethnicity of Lake Clark affiliated communities, 2004.



In contrast to the aforementioned communities, the predominantly non-Native (82 percent) of Port Alsworth has shown a substantial 30 percent increase in population during the last two decades. Clearly very different economic and demographic forces, including differential migration, are affecting these five communities; special note should be taken of the predominantly Native communities that have taken substantial reductions in population from their peaks, or in the case of Pedro Bay, barely remained even.

Table 3. Percent Native ethnicity of Lake Clark affiliated communities based on available ADF&G survey data

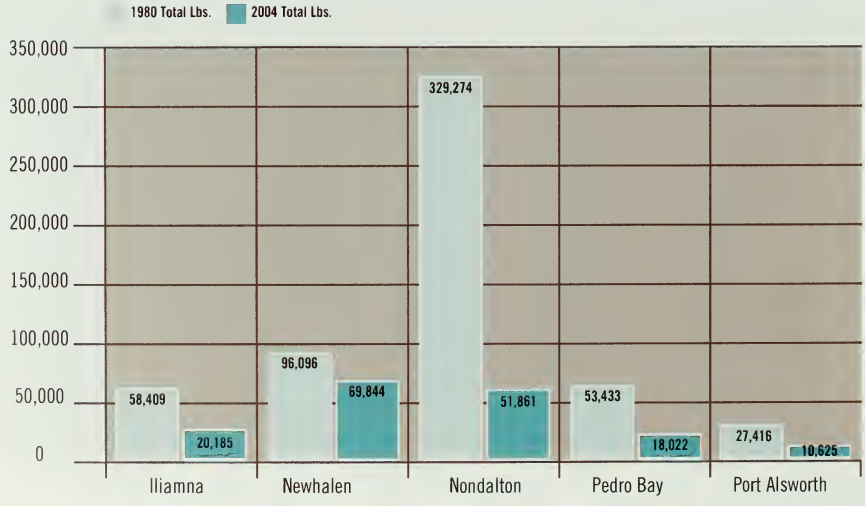
Study Year	Community	% Native Ethnicity
1991	Iliamna	73%
2004	Iliamna	67%
1991	Newhalen	97%
2004	Newhalen	96%
1980	Nondalton	93%
2004	Nondalton	90%
1996	Pedro Bay	60%
2004	Pedro Bay	71%
2004	Port Alsworth	18%

Later and more detailed analysis will consider population pyramids through time to determine whether the mean age in the community is becoming younger. In addition, changes in the composition of the population, including ethnicity, household type and other factors will also be explored. Finally, a complete examination of recruitment for subsistence activities by age cohort will also be examined.

Subsistence Harvest Levels

As Figure 13 (Total Subsistence Harvest, 1980s vs. 2004) clearly demonstrates, every community in the region has experienced a decrease in the total amount of wildlife resources they have harvested during the last two decades. Some of this can be partially explained by

Figure 13. Total subsistence harvest (lbs.), 1980s vs. 2004.



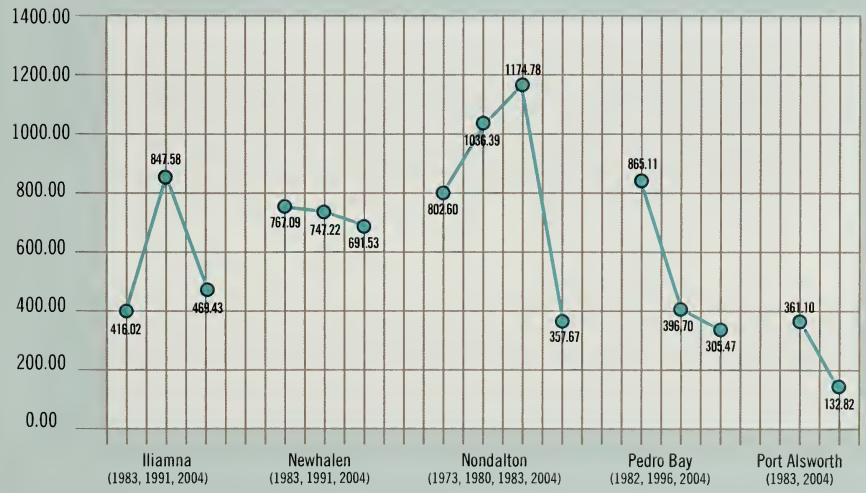
substantial drops in community population, especially for the communities of Iliamna and Nondalton, during this period. However, Figure 14 (Per Capita Subsistence Harvests over Time) indicates this is a complex issue. For example, Iliamna residents' per capita harvest actually increased between 1983 and 2004 although their per capita harvest peaked in 1991 with levels twice what they are today.

During these two decades Newhalen's harvest declined by a gentle 10 percent whereas Nondalton not only lost 40 percent of their community's population during this period, their per capita harvest declined by an astounding 70 percent. And while Pedro Bay's population remained constant during this period its per capita harvest declined by two thirds. Finally, Port Alsworth's population increased by about 30 percent yet its per capita harvest declined by a very substantial 66 percent.

Since there is no simple linear relationship between the size of a community and its gross harvest or per capita harvests over time other factors must be contributing to these outcomes. Changes in resource availability may be an important factor, with substantial variation in annual salmon runs during this period, especially some dramatic decreases. Caribou have also cycled with the major herd in this region peaking in the early 1990s and decreasing substantially since then and these two factors may in part might help account for some of the general decline in subsistence harvests.

Declining salmon runs and declining prices on the world market have also had a dramatic impact on the region where commercial fishing provided considerable cash flow to local communities, including substantial investments in subsistence technology. Declining commercial fishing jobs may also influence increased emigration from local communities as some of the high harvesting men and their families move to find jobs in other areas. These and other factors need to be considered when one attempts to understand changes in subsistence activities over time. The forthcoming Volume III will attempt to untangle some of this complex causal web in its detailed multivariate analysis.

Figure 14. Per capita subsistence harvests over time.



Are the changes in per capita subsistence amounts mirrored in changes in the proportion of resource types (e.g., fish, land mammals) harvested by a community? Once again the outcomes are complex. Iliamna, which had sharp increases in per capita harvests between 1980 and 1990, followed by sharp declines in 2004, indicates a drop in fish dependency with a concomitant increase in caribou harvests during that herd's peak size and extent. Newhalen, on the other hand, which shows no rise and fall in per capita harvests, exhibits nearly the same rise and fall in caribou dependency during this period, as does Pedro Bay, which, however, has experienced a sharp decline in per capita harvests of all resources since the 1980s. Unfortunately, we have no harvest information for Nondalton for the 1990s; however, we suspect it too would experience substantial increases in their dependency on caribou in the 1990s. Table 4 provides the details of changes in resource type dependency, with changes in the proportion of land mammals (usually caribou) harvested highlighted in yellow.

In summary, there is no simple explanation for the variations in resource extraction exhibited in the ADF&G data collected over a period of 30 years for the communities in the Lake Clark region. Changes in community size, proportion of indigenous families, availability of resources (reflecting the effects of commercial fishing and of sport fishing and hunting), emigration, and in the regional economy all have differential impacts on the outcomes for the individual communities. Table 5 summarizes amounts and proportion of resource types for the five communities during this period.

Table 4. Changes in resource type dependency, 1980s through 2004

Community	Resource Type	% in 1980's	% in 1990's	% in 2004
Iliamna	Fish	87.0%	59.9%	87.2%
Iliamna	Land Mammals	8.0%	31.0%	6.9%
Iliamna	Marine Mammals	0.5%	4.9%	1.4%
Iliamna	Birds and Eggs	0.6%	1.8%	9.0%
Nondalton	Fish	80%	-	71%
Nondalton	Land Mammals	17%	-	23%
Nondalton	Marine Mammals	0%	-	0%
Nondalton	Birds and Eggs	1%	-	1%
Port Alsworth	Fish	70%	-	76%
Port Alsworth	Land Mammals	27%	-	19%
Port Alsworth	Marine Mammals	0%	-	0%
Port Alsworth	Birds and Eggs	1%	-	1%
Newhalen	Fish	92%	61%	77%
Newhalen	Land Mammals	5%	31%	15%
Newhalen	Marine Mammals	1%	1%	1%
Newhalen	Birds and Eggs	1%	3%	2%
Pedro Bay	Fish	91%	80%	87%
Pedro Bay	Land Mammals	6%	18%	10%
Pedro Bay	Marine Mammals	0%	0%	0%
Pedro Bay	Birds and Eggs	1%	1%	1%

Income

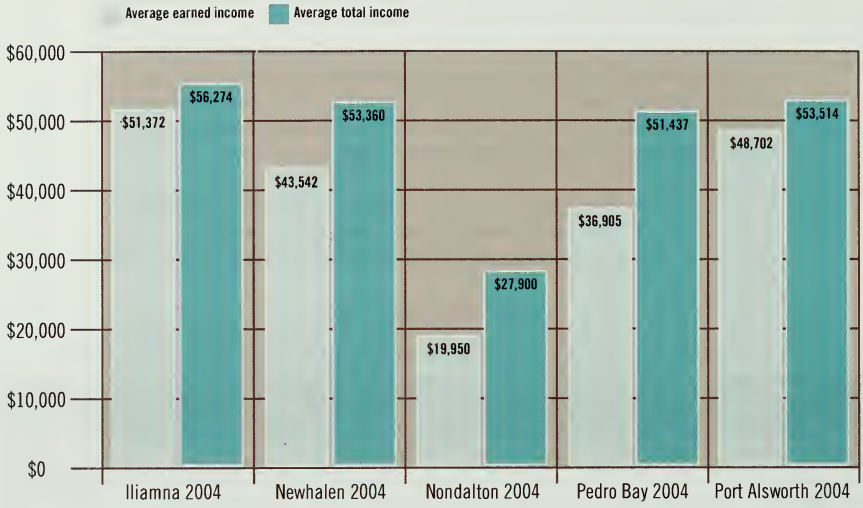
Figure 15 shows the distribution of household income for the five communities considered so far in the Lake Clark region. Four of the communities have average annual household incomes that are within less than 10 percent of each other, all between $51,000 and $57,000 in 2004, although two of the communities—Newhalen and Pedro Bay—achieve this level by substantial contributions from non-earned sources. In contrast Iliamna and Port Alsworth receive more than 90 percent of their household income from earned sources. For comparison the average household income in Anchorage for a similar period was $61,217.

In stark contrast the community of Nondalton has only about half the total household income of other communities in the region. Unfortunately, this income shortfall is not necessarily compensated for by higher levels of subsistence harvest (with Port Alsworth being the exception to this generalization).

Table 5. Changes in resource amounts and proportion of resource types, 1983 to 2004

Community	Resource Type	1980's Total Lbs.	% in 1980's	1990's Total Lbs.	% in 1990's	% in 2004	2004 Total Lbs.
Iliamna	All Resources	58,409.00	100.00%	82,915.00	100.00%	100%	20,185
Iliamna	Fish	50,820.00	87.01%	49,696.00	59.94%	87.20%	-
Iliamna	Salmon	47,149.00	80.72%	-	-	78.90%	-
Iliamna	Land Mammals	4,649.00	7.96%	25,682.00	30.97%	6.90%	-
Iliamna	Marine Mammals	270.00	0.46%	4,063.00	4.90%	1.40%	-
Iliamna	Birds and Eggs	366.00	0.63%	1,516.00	1.83%	9.00%	-
Newhalen	All Resources	96,096.00	100.00%	117,716.00	100.00%	100.00%	69,844
Newhalen	Fish	88,518.00	92.11%	72,116.00	61.26%	77.20%	-
Newhalen	Land Mammals	4,973.00	5.18%	36,092.00	30.66%	15.20%	-
Newhalen	Marine Mammals	709.00	0.74%	1,310.00	1.11%	0.60%	-
Newhalen	Birds and Eggs	673.00	0.70%	3,276.00	2.78%	2.30%	-
Nondalton	All Resources	329,274.00	100.00%	-	-	100.00%	51,861
Nondalton	Fish	264,393.00	80.30%	-	-	71.00%	-
Nondalton	Land Mammals	55,820.00	16.95%	-	-	23.00%	-
Nondalton	Marine Mammals	0.00	0.00%	-	-	0.00%	-
Nondalton	Birds and Eggs	2,442.00	0.74%	-	-	1.00%	-
Pedro Bay	All Resources	53,433.00	100.00%	24,931.00	100.00%	100.00%	18,022
Pedro Bay	Fish	48,818.00	91.36%	19,895.00	79.80%	87%	-
Pedro Bay	Land Mammals	3,350.00	6.27%	4,560.00	18.29%	10%	-
Pedro Bay	Marine Mammals	0.00	0.00%	0.00	0.00%	0%	-
Pedro Bay	Birds and Eggs	284.00	0.53%	135.00	0.54%	1%	-
Port Alsworth	All Resources	27,416.00	100.00%	-	-	100%	10,625
Port Alsworth	Fish	19,089.00	69.63%	-	-	76%	-
Port Alsworth	Land Mammals	7,347.00	26.80%	-	-	19%	-
Port Alsworth	Marine Mammals	0.00	0.00%	-	-	0%	-
Port Alsworth	Birds and Eggs	332.00	1.21%	-	-	1%	-

Figure 15. Average household earned and total income, 2004.



A perusal of Table 6 also indicates that these levels of income, for at least three communities—Iliamna, Pedro Bay and Port Alsworth—represent an absolute decline (i.e., not in constant dollars) in financial resources since 1991. In addition, in the last decade the aggregated total income for these communities has declined sharply (Iliamna, Pedro Bay) or dropped in constant dollars (Newhalen, Nondalton). Only Port Alsworth seems to be the exception, although we lack a 1990s ADF&G data point to confirm this.

Table 6: Average household and community earned and total Income, 1983-2004

Community and year of survey	Average earned income	Average total income	Estimated total community income	Estimated total community wage income
Iliamna 1983	$34,500	$28,125	$1,012,500	$1,242,000
Iliamna 1991	$62,209	$67,440	$2,023,194	$1,866,268
Iliamna 2004	$51,372	$56,274	$731,570	$667,837
Newhalen 1983	-	$82,000	$2,132,000	-
Newhalen 1991	$26,572	$35,350	$1,131,211	$850,311
Newhalen 2004	$43,542	$53,360	$1,334,003	$1,088,562
Nondalton 1983	-	$18,533	$1,000,799	-
Nondalton 2004	$19,950	$27,900	$1,060,236	$758,119
Pedro Bay 1982	$15,481	$21,731	$456,346	$325,098
Pedro Bay 1996	$45,646	$57,579	$1,094,010	$867,282
Pedro Bay 2004	$36,905	$51,437	$925,874	$664,296
Port Alsworth 1983	$20,725	$73,429	$1,541,999	$435,225
Port Alsworth 2004	$48,702	$53,514	$1,117,321	$1,071,462

In summary[31] a variety of demographic, economic and environmental processes have impacted the communities of the Lake Clark region in the last 30 years. It is not completely clear what these processes have meant for subsistence activities, and better understanding of these impacts is the objective of a further planned volume. In general it does seem that harvest levels have declined from previous highs and that the economic condition of these communities, especially Nondalton, remains problematic.

REGULATED SUBSISTENCE

The Alaska National Interest Lands Conservation Act (ANILCA) was passed in 1980. It provided for the selection of large areas of land for National Parks and other federal lands. And it also provided for the continued "customary and traditional uses" of resources from these lands. This is significant for the National Park Service since in most other parks in the NPS system outside of Alaska, hunting, fishing and other subsistence practices are not allowed. Title VIII of ANILCA outlines the parameters of subsistence management. Rural Alaskans can gather what they need from the environment—within limits—not only meat, fish, berries and other edible items, but also firewood, bark and grasses for baskets, and many other materials for clothing, crafts, transportation and customary trade. Significantly, "rural Alaskans" includes Native as well as non-Native residents, which together amount to roughly 20 percent of the population in Alaska. In rural Alaska, just over half (51 percent) of the rural population is Alaska Native (Wolfe 2000:1).

Subsistence fishing and hunting are regulated by both the state and the federal government, with each overseeing their respective lands and waters. The Federal Subsistence Management Program is directed by a Federal Subsistence Board, which is made up of the Alaska directors of the U.S. Fish and Wildlife Service, National Park Service, Bureau of Land Management, Bureau of Indian Affairs, and USDA Forest Service. The chair of the Board is appointed by the Secretary of the Interior, as are the members of ten Regional Advisory Councils from throughout the state. Representatives from the State of Alaska also inform decisions and activities of the Federal Subsistence Board. Regional Advisory Council members serve as contacts between the Subsistence Board and residents of their communities. Regional Council meetings, which occur at least twice a year, are opportunities for community members to provide input into the constantly evolving Federal subsistence regulations. On the state level, the Alaska Board of Fisheries and the Alaska Board of Game oversee regulations for hunting and fishing on state lands. Hunting of marine mammals is regulated by the National Marine Fisheries Service and the U.S. Fish and Wildlife Service. Within the National Park Service, a Subsistence Advisory Council, with representatives from parks and offices throughout the state of Alaska, advises the NPS staff who work on subsistence issues.

Most of the communities associated with Lake Clark National Park and Preserve are represented by the Bristol Bay Advisory Council, Region 9 in the Federal Subsistence Management Program. Tyonek, however, is represented by the South Central Advisory Council, Region 2.

In both state and federal law, subsistence fishing and hunting are given priority over commercial and recreational hunting and fishing. If fish or animal populations are too low to support commercial, sport and subsistence harvests, subsistence use is given priority, and restrictions must apply to commercial and/or sport harvests first (Wolfe 2000:4). Overall, the subsistence harvest in Alaska makes up only about 2 percent of the fish and game harvested. This seems like a very small amount compared to the overwhelming majority of harvest taken by commercial fisheries (97 percent). Sport fishing and hunting make up about 1 percent of fish and game harvest in Alaska (Wolfe 2000:2). While it may seem a small part of the overall harvest, subsistence fish and game, at an estimated 375 pounds per person per year, or roughly a pound per person per day, make up a significant portion of rural residents' annual food intake (Wolfe 2000:2).

[31] The material for this chapter was derived from the ADF&G Community Profile Database (CPDB), ADF&G Draft Technical Paper No. 302, "Subsistence Harvests and Uses of Wild Resources in Iliamna, Newhalen, Nondalton, Pedro Bay and Port Alsworth, Alaska, 2004" and SPSS files in the author's possession.

Figure 16. Map of ten Federal Subsistence regions, courtesy Office of Subsistence Management, USFWS.

Some view subsistence management in Alaska as a progressive and successful solution to the issue of conserving lands while still providing for local subsistence needs. Still, many rural Alaskans chafe under the restrictions and complexity of subsistence management, and they rue the loss of freedom to simply hunt and fish where and when they like, as their needs dictate. Although part of the role of Regional Advisory Council members is to help assure that federal hunting and fishing rules are consistent with traditional practices, running commentary in rural communities reflects a certain amount of resistance to the external, and highly bureaucratized, presence of subsistence regulations. People joke (or half-joke) about "Native" permits and seasons ("When the freezer is empty"). And state and federal subsistence managers are well aware that reported harvests and real harvests do not overlap perfectly.

As Albert Wassillie said in an interview,

> We use to have two cache—big, wooden cache, fill it up so you can't go in there, fish bones and regular dried fish for the dogs. And those times, Fish and Wildlife [territorial fish and game management], they leave everybody alone.... Nowadays you gotta tell them how much fish you got. (Albert Wassillie, Sr. 1986)

CONTEMPORARY SUBSISTENCE

Subsistence management today is indeed a complex issue. Hunters and fishers are expected to set forth each season with the requisite subsistence regulation booklets from both federal and state boards, watching calendars for open days, and counting their catch to stay within limits. They must be aware of boundaries between various areas of jurisdiction, which are often unmarked or poorly marked. As Case and Voluck noted, ANILCA's effort to provide for subsistence has "generated one of the most complex legal and political issues to face the state of Alaska" (Case and Voluck 2002:17).

Despite its complexity, subsistence management in Alaska provides for the continuing practice of activities that are economically, nutritionally, spiritually and socially central to Alaska Native life. Working together to set nets, catch and process fish in fish camps, gather and process berries, or any number of other subsistence activities means cooperating, joking, working to exhaustion, and enjoying a sense of accomplishment and preparedness for the winter ahead. The sharing and exchange of harvested meat, fish, berries and other items solidifies community bonds, and spreads resources among households, providing food for those who are unable to obtain it themselves. Subsistence foods contribute to an overall mixed economy, in which Dena'ina, like other rural Alaska Natives and non-Natives, piece together a number of sources of cash income along with resources that are gathered and exchanged. In this way, communities share the burden of difficult times as well as the wealth of abundant times.

In a recent subsistence harvest study conducted by the Alaska Department of Fish and Game, residents of Iliamna, Newhalen, Pedro Bay, Port Alsworth and Nondalton participated in extensive surveys about all the subsistence resources they harvested in the previous year (Fall et al. 2006).[32] The project was one of many baseline studies for Northern Dynasty, the mining company that aims to develop an open pit mine eighteen miles northwest of Iliamna. The study found that virtually all 116 year-round households interviewed participated in some way in subsistence activities by hunting, fishing or processing fish, picking and processing berries, or by giving or receiving subsistence products. Households used many different types of wild resources. Although there was variation across villages, residents of the region harvested several hundred pounds of usable resources per person for the year (Fall et al. 2006:276). Subsistence foods are very high in nutritional value, and would be extremely costly to replace with store-bought foods.

For residents in the Lake Clark and Iliamna Lake area, a number of concerns simmer around subsistence practices today. Local residents are also concerned that caribou and moose are being overhunted by non-local hunters, reduced by wolves and bears, and, at present, driven away by helicopters from the new mine site. They are concerned that Dolly Varden in the Iliamna River are being depleted by sport fishers, and that the sockeye salmon numbers have been very erratic over recent years. Residents note that warmer winters make trapping difficult, delay freeze-up of lakes, and affect caribou movement (Fall et al. 2006: executive summary).

The proposed mine is itself a concern to some of those living in the region, many of whom think the planning and exploration associated with the mine have already caused declines in subsistence opportunities and the subsistence way of life. The ADF&G subsistence study, conducted in partnership with the National Park Service, also documents residents' other subsistence-related concerns about how the mine will affect resources. Potential effects on salmon habitat is a central concern. In addition, freshwater seals live among the island system of Iliamna Lake, and residents are concerned about effects of a nearby road on haul-out areas. Some people are also worried about how air and water quality will be affected by heavy traffic on the proposed road (Fall et al. 2006). Village residents in the survey noted that potential mining jobs are not exchangeable for subsistence activities. On a nutritional as well as symbolic level, subsistence activities directly link Dena'ina people to the lands and waters of their ancestors. Whether they are full-time village residents, or come out from urban areas to help relatives with seasonal harvests, subsistence practices connect contemporary Dena'ina to a central element of their heritage and identity.

SUBSISTENCE SUMMARY

Dena'ina people of today still rely on early spring fishing, summer fishing and berry picking, and fall and winter hunting, but whole families no longer move about from camp to camp as in years past. Even at the time that Ellanna and Balluta conducted their ethnographic study of the Nondalton region in the mid-1980s, few families were following the tradition of going out to camps to fish, hunt and trap all year round (1992: 172). This is partly because responsibilities such as school and jobs keep people tied to villages or to urban areas for longer periods of time during

[32] The study is discussed in Chapter 5 above in the inset by Donald Callaway.

the year. Changes in transportation technologies, and the availability of all-terrain vehicles and snowmachines, means that hunters can cover great distances in a day. The machines also help in packing the meat out. People no longer have to hike a long way far to find wildlife. Since these machines have replaced the dog teams, much less food needs to be put up for the winter. Additionally, freezers allow people to store meat conveniently in the home, and caches are no longer used to store meat or fish.

Although income is not always easy to secure, and prices in the villages are high, people have come to rely on store-bought groceries for a substantial part of what they eat. In addition, fish and wildlife populations vary. Some years are better than others for salmon. Some subsistence hunters report that the availability of moose and caribou, two species that sport hunters seek in the area, has dropped radically in recent years. While some residents suggest that wolves are causing numbers to drop, subsistence hunters from virtually every village have expressed concern that sport hunting has both reduced available animals, and driven them away with power boats and airplanes (Fall et al. 2006).

Fish camp is still central to the seasonal round for Dena'ina families. Some family members return from urban areas or even from outside the state to help put up fish. The catching and processing of salmon is a highly significant subsistence activity. The work of fish camp brings families and communities together in an important activity with spiritual as well as practical elements.

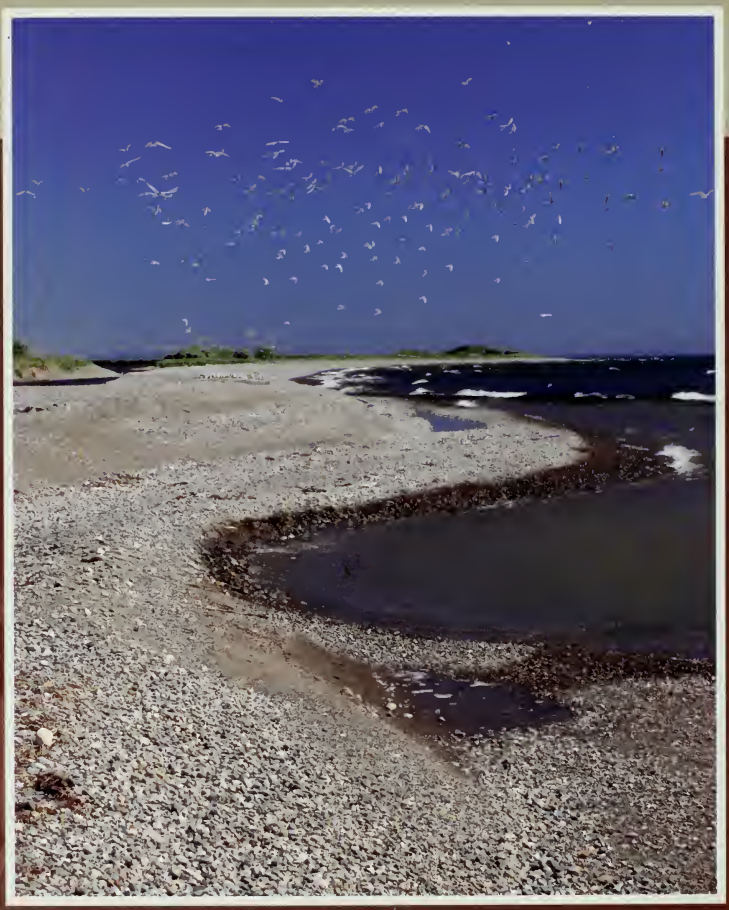
The identities of many Dena'ina of today are closely tied to the lands around them. The activities of their ancestors across the hills and along rivers and streams of the region, and the meaning and character that was ascribed to these places, is a knowledge base and a set of understandings still important to Dena'ina today.

Despite what rural Alaskans gain from their subsistence harvest, obtaining the resources means hard work. Of course technologies have changed in recent decades, with snowmachines and off-road vehicles replacing dogs and sleds, motorboats replacing kayaks and sailboats, and even airplanes now used to assist in hunts. Guns have been part of the hunting experience for more than a century. Manufactured boots and clothing have replaced most of the traditional clothing made from natural materials. And now, as Native subsistence users point out, subsistence itself takes a fair amount of capital. In order to harvest a healthy supply of fish, one needs a boat, fuel, good nets and other equipment. Beyond the initial price of ORVs and snowmachines, their fuel and upkeep are expensive. In this regard, those in a community with access to cash will have the most successful subsistence harvests as well.

Dena'ina accounts of adapting to, moving across and living intimately within the richly complex terrain of the Lake Clark region offer a glimpse of decades and centuries worth of human interaction with this area. Although a number of highly detailed, and invaluable oral histories exist for the area, many more stories, experiences and rich bodies of knowledge are a silent part of the landscape.

It is essential that park managers understand this depth of time and breadth of movement over the lands that make up Lake Clark National Park and Preserve. National Park Service systems for identifying cultural landscapes or ethnographic resources offer some ways to account for this long history of human presence in the area. These management devices may come up short, however, in the face of the complexity of resource use, detailed knowledge, and infinite associations and meanings. To date, two areas associated with Lake Clark National Park and Preserve have been included in the Cultural Landscapes Inventory: the Kijik Archeological District and the Telaquana Trail travel corridor. While these significant sites are clearly worth documenting, they are not isolated sites of cultural meaning. Instead, they should be viewed as two highlighted Cultural Landscapes in a broader environment that is richly imbued with social meaning, deep historical ties, and ongoing use. The sites are only two features in a thoroughly traveled, intimately known topography. Recommendations for further areas to be considered for the Cultural Landscapes Inventory are listed in the final chapter.

Conveying this multilayered history to staff and visitors to Lake Clark National Park and Preserve must be an important priority for Park managers. Lake Clark is indeed a ruggedly beautiful, vast and wild place. Its landscapes, however, in all their ruggedness, are not untouched by humans. In fact, they have been traversed, named, hunted across, gathered from and spoken about in countless stories for many generations. In this sense, natural and cultural resources become indistinguishable; all of the natural world is understood, observed, captured, processed and consumed and deeply respected in cultural terms. These are all the rich ethnographic resources of Lake Clark National Park and Preserve.



Flock of arctic terns wheeling in the sky above the beach, Lake Iliamna.
Photo by Erin McKittrick.

CHAPTER SIX
Family and Community Ties

KINSHIP

Cultures all over the world account for their families and social networks in unique ways. Family and kin represent more than simply who one's relatives are. Broader kin networks may also define who shares work, who shares food and other resources, who provides support in adversity or conflict, who marries whom, where people live after marriage, and much more. Anthropologists have long studied the many variations of kinship that people around the world have adopted, noting such elements as how descent is traced, marriage rules, residency patterns, and kin terminology.

It is difficult to fully understand traditional or pre-contact Dena'ina kinship patterns for a number of reasons. First, kinship patterns changed a great deal during and after the contact phase. Leadership roles also underwent considerable change and readjustment through the late-eighteenth and throughout the nineteenth century. Second, both aboriginally and after Euroamerican contact, patterns of kinship were articulated in diverse ways over the various Dena'ina regions. What James Fall found for the Upper Inlet Dena'ina was different from what Joan Townsend observed in the Iliamna groups (see also Ellanna and Balluta 1992:104-105). Additionally, as Ellanna and Balluta cautioned, what anthropologists identify as kinship "rules" may in fact be more like tendencies, not too be taken as hard and fast patterns. And, for the Dena'ina as for many other cultures, members in the community may take on a role of kin, known as "fictive kin," even if they are not relatives by normal rules. Dena'ina may speak of their *chida* or grandmother, for example, when the person is not a "true" grandmother, but someone treated with the same love and respect as if she were.

In the early twenty-first century, a Dena'ina person's identity is still strongly tied to whom she or he is related to, and how the individual is situated in the larger community. Traditionally, Dena'ina across the inland region were matrilineal, tracing clan descent through women and their offspring.[33] A woman, her brothers and sisters, and her children all belong to the same clan. Anthropologist Linda Ellanna noted that in Dena'ina society, a woman's brothers and her mother's brother are more significant to her and her children's lives than her husband or father. At the same time, "...a woman's offspring are the most significant children to her brothers and her mother's brothers" (Ellanna and Balluta 1992:100). In a matrilineal system, sibling links may be stronger than ties of marriage.

In 1937 Osgood pieced together a somewhat uncertain list of two groups (or moieties) of matrilineal clans among the Tanaina, or Dena'ina (Osgood 1937:128). These two groups stood in an exogamous relationship to one another: ideally, the member of one moiety married a partner from the opposite moiety. James Fall noted that moiety membership was not only the basis for arranging marriages, but determined important roles in potlatches and funerals. One's clan identity also established social position or rank, with some clans carrying more prestige in certain areas than others (Fall 1987:39).[34]

Osgood observed that the exogamous function of the moieties among the Dena'ina had broken down following years of European occupation. Additionally, few people could name more than a handful of clans at the time of his research. Fall also observed some confusion of various clan affiliations, and that most contemporary Upper Inlet Dena'ina were unfamiliar with even basic kinship terms (Fall 1981:231, 233).

Townsend observed that some features of matrilineal sibs (clans) and moieties found among the Dena'ina are common to other Na-Dene (including Tlingits, Haidas and Eyaks as well as Athabascans) people of southern Alaska, and proposed that the clan system was changing in several ways as a result of the fur trade and other cultural contact (Townsend

[33] Ellanna and Balluta offer a literature review and summary of debates on the possible adaptive reasons for matrilineality in hunter-gatherer societies, and among northern Athabascans in particular, as well as a discussion of basic kinship terminology and concepts (Ellanna and Balluta 1992:99-104).

[34] For more detailed discussions of Tanaina/Dena'ina kinship relations and terminology, see Osgood 1937, Fall 1981 and 1987, Kari 1977, and de Laguna 1934.

1965). Ellanna and Balluta (1992:104-105) suggested that Townsend's generalizations about change were premature. In the 1980s, when Ellanna and Balluta were conducting their study, they found that Dena'ina residents of the Nondalton and Lime Village areas could identify eight matrilineal clans: *nuhzhi* (the "clean" or "neat" clan), *ggahyi* ("raven" clan), *k'kali* ("fishtail" clan), *yusdi ghulchina* ("end of the point" clan), *q'atl'anht'an* ("head of the lake" clan), *tulchina* ("water" clan), *qukuht'an* ("downriver" clan), and *chishlaht'an* ("independent" or "paint" clan). These clans were set up in paired relationships with one another, which ideally directed particular obligations or behaviors between members of paired clans (Ellanna and Balluta 1992:107; see also Boraas and Peter 2005).

However, Ellanna and Balluta also noted that reconstructing a definitive picture of prehistoric kin organization is difficult if not impossible (1992:100). Anthropologists have speculated about possible origins, such as Asian sources, for matrilineality among Athabascan groups (Ives 1990). Marilineality is less common worldwide than patrilineality, particularly among hunter-gatherers. Ellanna and Balluta cautioned that scholars' efforts to fit kinship systems into the patrilineal, matrilineal, bilateral, or other categories "...may elude the complexity, flexibility, and dynamic nature of social processes in favor of neatly taxonomic classification" (1992:100-101).

Knowledge of the details of kin relations in the past is somewhat more dissipated today, some twenty-five years following the Ellanna and Balluta project, and even longer since Fall conducted his research with the Upper Inlet Tanaina (Fall 1981:233). While collecting new ethnographic data to ascertain the range of contemporary knowledge on Dena'ina clan organization is beyond the scope of this project, it is an area that needs additional research.

Matrilineality refers to how descent is traced, and the kinds of relationships that may obtain between women, their brothers, and their offspring. It does not imply that women are always key decision makers, or that they have high social position or power. Matrilineal societies are not necessarily matriarchal. Dena'ina men have tended to act as community leaders and decision-makers. Men are depicted as warriors, heroes and strong community leaders in Dena'ina oral traditions. However, as many anthropologists have pointed out, individuals can influence and affect decision-making on many different levels, and power dynamics are played out in countless ways (Rosaldo and Lamphere 1974). While there are many examples of strong, outstanding Dena'ina women, men traditionally held positions of leadership (Fall 1987). Thus, a pattern of matriarchy does not accompany the pattern of matrilineality among the Dena'ina.

In addition to the clan system, there were informal networks that meant a web of support should a family need it. There are numerous stories of children who, for some reason or other, could not stay with their birth parents, or whose parents died. In such cases, other families would absorb and take care of children as was needed, often for life (see Townsend 1965:218).

John Branson noted that Dena'ina bands on both sides of the Alaska Range were historically interrelated: "Dena'ina men from Kijik, Telaquana, the Mulchatna villages, the Stony River, and Old Iliamna would travel east across the range and find mates from various Dena'ina bands in the Cook Inlet region" (Branson 2003:44). Today, in almost any conversation with people about the region, particularly if the discussion includes historic photographs of people, an interviewer will inevitably hear about kin ties that track back and forth across the region. A resident of Tyonek has a sister who is married to a man from Lime Village; Lime Village residents travel to visit relatives in Nondalton and in the Illiamna area; Kenai residents trace relatives all across these various communities, and pretty much everyone has relatives in Anchorage.

SOCIAL ORGANIZATION

Besides routine trading, visiting and every day social interactions, potlatch provided an event around which people could come together and celebrate. Potlatches were and are organized around deaths, marriages, and other significant events worthy of celebration.

> Potlatch is a thing that when a man loses his loved one you know, he's not satisfied until he pays everybody that was concerned. Then, it cost him a lot of money. That way, they sing a song and they usually hit the sticks, and then they...sing it the way they feel...how they feel in their heart....
>
> [T]hey would...invite people from Tyonek, Knik, or Matanuska and Point Possession all along there and all their neighbors around. And then they'd all come...you know, they had a lot of respect for each other. (Dick Mishakoff Ti1(2a) in Ellanna 1986:A-18)

Sometimes the potlatches would last up to a month, and the host family or community would need to feed perhaps two to three hundred people. In addition, the hosts would pay small sums of money to each person present. In Dick Mishakoff's example, it was around $3-$5 per person, which could add up to a very large sum.

In addition to mourning or celebrating, people came together to trade and gamble. Months of separation over distance and winter weather were brought to a close around a potlatch. People sang songs and played games together. One gambling song was said to be "so good that it distract[s] the other players, and they're paying more attention to the song than they are to the game" (Antone Evan 1980a, Ti64(1)). Antone Evan described gambling games, a flat stick game, tops, a string game like cat's cradle, and numerous other games people would play together, as well as the many kinds of songs they would sing when they gathered. "Summertime and wintertime they used to visit one another long ago," he said (Antone Evan 1980b, Ti65(2)).

LEADERSHIP

Social organization among the Dena'ina around the time of contact included some differences in terms of rank. Different individuals and families had more wealth than others, and also more privilege. Leaders called *qeshqa* acquired wealth through successful hunting, fishing, trapping and trading; the obtained prestige by distributing their wealth. *Qeshqa* helped direct hunts, organized fish camps, divided food resources, and provided leadership in a number of other ways (Fall 1985:6).

> In addition to this economic role, *qeshqa* assisted in the instruction of the young, settled disputes, and organized war parties. They were, in short, figures of authority, using their prestige and power based on resource distribution to solidify their political positions. (Fall 1985:8)

Initial Dena'ina resistance to the establishment of fur trading companies, and their protection of their territory, meant that the Dena'ina postponed direct involvement in the fur trade for some time. Eventually, many *qeshqa* served as middlemen in the fur trade, sometimes working as storekeepers (Fall 1985:8). Fall concluded that, contrary to what Osgood suggested (Osgood 1937:190), "rather than being disruptive, participation in the Euroamerican fur trade enhanced some features of the traditional Upper Inlet Tanaina socioeconomic system, including the role of leaders in trade" (Fall 1985:3).

> The *qeshqa* as an organizer, trader, and generous leader remained an important role in Tanaina social organization until the early 20th century, when severe population loss, the depletion of natural resources, and the changing regional economy undermined their traditional sources of power in the subsistence economy and the kinship system. By the 1920s, few *qeshqa*, few "rich men," survived. (Fall 1985:13)

GENDER AND DIVISION OF LABOR

Dena'ina have long practiced a division of labor based on gender. Although the rules were not hard and fast, men tended to hunt, trap and cut wood, while women also engaged in and helped with these activities. Women usually were, and continue to be, the ones to process meat and fish. At traditional fish camps, everyone helped to bring in fish, but men would take on the heaviest of this labor, and again, women would lead the processing of the fish. Of course, many men were also skilled in cutting fish, and as the fish piled up, everyone lent a hand in the cutting and processing. Ellanna and Balluta noted that, "The successful production of salmon required a balanced division of labor between those who fished and those who processed the fish" (1992:196). This is also true for hunting and processing meat (Ellanna and Balluta 1992: 201).

Some of these dynamics changed as men opted to participate in other enterprises such as commercial trapping, fishing, cannery work, guiding or other employment. Some women and young girls worked in canneries as well. When adult males—and sometimes females—left their home villages, the subsistence workload shifted to those who remained behind. The cash income may have meant the family had less pressure to hunt and gather food to store for the winter. But as subsistence practices increasingly included motorized transportation, costs for fuel and maintenance of boats and ORVs meant that even these endeavors required a fair amount of cash.

In general, once men left the subsistence harvest process, women had to take up leadership roles. In many of today's fish camps, although key senior men are identified and respected as central figures, there is often a central female leader and organizer who oversees the processing, and often the fishing itself. For example, Sarah Thiele from Pedro Bay explained that in the 1950s, her father left every summer to fish commercially in Bristol Bay. He continued to do so for the next fifty years. Her mother, helped by Sarah and her other children, had to take central responsibility at their subsistence fish camp. In recent years, Sarah's own role has evolved into the most central one. She relayed her sense of accomplishment and pride in being the "beach boss" in recent fish seasons. All the years of returning to fish, even after she and her family moved to Anchorage, meant continuity in her training. She was surprised at her knowledge and ability to run the whole fish season from start to finish, with the help of her own daughters. She has emphasized to them the importance of returning to fish camp every year to learn the process, even though they live in urban areas, or go out of state for college.

For Dena'ina in the present as well as in the past, participating in the work of hunting and gathering or of maintaining the household and equipment, means sharing work. And this participation is how children of all ages learn the skills necessary for processing meat or fish, storing and preparing foods, and using the equipment necessary for work inside or outside of the home. In the past, when almost everything used or worn was made from locally available materials, the work was even more intensive and constant. Dishes, for example, were fashioned from wood and birchbark. Men would carve wooden bowls, ladles, and other utensils (Mary Hobson 1985).

In a number of ways, technologies and the work that went with them, determined something about the pace of life. In the past, it took a fair amount of time even to construct the tools and transportation necessary to fish and hunt. Most elderly people of today can recall the process of building sleds. Pauline Hobson remembered being directed by her mother in

the process of cutting long sinews from moose hide to make snowshoes. She explained that young girls would grow their fingernails a certain length in order to measure and score the sinew to just the right width for snowshoe lacing. Sinew was cut at different widths for other purposes. Pauline also remembered her father making a skin boat from two moose hides. She recalled scraping the hide all through the winter, making it finer and thinner. When the boat was finally constructed, the skin was nearly transparent, like a glass-bottomed boat, and she couldn't wait for her turn to ride in it (personal communication, 2004). In these tasks, women and men, young boys and girls, all contributed labor to making final products of snowshoes or boats. The labor, such as countless hours of scraping the skin for the boat, took place over many months, in various installments. The final results also benefited the entire family or broader extended family and community.

In an interesting study by Frink, Hoffman and Shaw on the ethnoarcheology of ulu use, experiments with slate and steel knives conducted with local women showed that the metal ulus and later the flat-bladed steel knives, were more efficient than slate tools. In fact, some cutting techniques—such as cutting strips—were probably developed after the slate ulus and because of the new knife technology. The slate ulu crumbles when used in such a way. Although this study was done in the Yukon-Kuskokwim delta, the results suggest that new, more efficient technologies may affect gender-specific labor in particular ways (Frink et al. 2002).

In the case of Dena'ina salmon processing, women were and are the main processors of fish, although, as mentioned, the labor of processing is sometimes shared between women and men. Paralleling the conclusions of the Yukon-Kuskokwim ulu study, Dena'ina men could not catch more fish than women could process. Women's work, therefore, regulated and set the pace of production. Women can process scores of fish per day but, as the above researchers note, they also are in charge of cooking, feeding people, and taking care of children throughout the fish processing.

> By way of contrast to the hunting of large game, older men, women of all ages, and young boys and girls, except for the latter in their first menses, were productive in hunting or snaring small game, such as ground squirrels, hares, ptarmigans, grouse and porcupines. Ground squirrels and hares were essential sources of both meat for food and hides for clothing. (Ellanna and Balluta 1992:201)

> The women snared rabbits for food and for the skins for mittens, blankets, coatings, socks, hats. In a place where there were lots of willows and thus many rabbits, they would lay brush like a fence and put snares over the holes with spring pole arrangements. Then they would drive the rabbits to the fence where they would go through the holes, be caught in the snare, and hoisted up by the springpole. (Mary Hobson 1985)

Women also used snares for ptarmigan. (For detailed discussion of snare construction and use, see Chapter 5.) Snares didn't require ammunition. Many people couldn't afford ammunition, and it was a long way to trading posts (Mary Hobson 1985).

Ellanna and Balluta also noted that the production/consumption unit was not necessarily a "household," i.e., a group of people living under one roof. A "household" might mean any number of people coming and going in a day, week or month. Nor was the production unit a nuclear family. Family included far-reaching kin as well as non-kin, forming large networks which enabled people to share resources and work.

Gathering plants and berries was principally a task undertaken by females of all ages and young boys. However, often men expressed the view that gathering berries was both productive and recreational, although few believed that they had the patience to undertake this activity on a regular or systematic basis. (Ellanna and Balluta 1992:201)

Those children, your children,
sometimes you should advise them.
When you give them advice on what kind of person they should be,
they will think in that manner.
They will become that kind of person.
If you don't advise them,
they will become people in their own self-image.
As people then we give advice to each other and
the people try to improve.
The new generation can improve.
There is no new generation that has not been trained to be people
since the beginning of the earth.
Those people that are growing from one generation to the next can advise each other.
When they advise each other and if he wants to listen
then they will advise him and he will understand.
He who wants to listen well to what they tell him will then be a good person.
They can use this [advice] with their people.
They will not be poor.
They will be successful.
As people we are all different though we don't always notice that.
We are different from one another in our lives and therefore
some people who seem to support themselves well are in fact helpless.

Photo 37. Paul Cusma holding daughter, Hilda Cusma on the Newhalen River, 1946. Child care was shared by all members of the family, extended family, and community. NPS photo H60.

They don't do well.
If those people are actually lazy, then that is how they act.
Those who work for themselves do well.
They are not helpless and they are successful people.
This is why they should advise the children.
Now we people no longer do this.
We should give a little advice to one another and that will be good enough.
Then this village will be good.
This is enough.
(Gabriel Trefon 1961, 1985)

Care for children was folded into the rhythm of work that women, men and older siblings carried out day to day, year to year. The care of especially young children fell mostly to women. Carrying infants on cradleboards, women continued to be fairly mobile, even with newborns. In numerous oral accounts, Dena'ina tell of babies being born en route on long trails, or out at fish camps. Even up to a generation or two ago, childbirth took place in people's homes or wherever they were, without hospitals, clinics or the help of doctors.

Clothing and wraps for infants, toddlers and children was similar to that of adults in that it was made from furs, hides, or fabrics obtained from stores or through trade. Townsend noted that in the Iliamna area, boys' clothes were made of an unborn animal's skin and were more ornately decorated than girls' clothing (Townsend 1965:216). Elders say that in the past, there was no need for bottles; children nursed until they were ready to eat foods. In oral history accounts, women recount that they gathered yellow moss from the bogs and, after drying it in the summer sun, used it for diapers and other absorbent needs. (Mary Hobson 1985; see also Townsend 1965:212-217). Mothers made little potty chairs from birch bark, holding their toddlers over them regularly until they learned to use them (Mary Hobson 1985). Eventually, of course, local organic substances used for clothing and absorbent materials were replaced by store-bought diapers and clothing, and bottles were introduced.

In more recent generations, women visit the Native hospital in Anchorage, or health facilities in other towns, for prenatal care. This may involve flying some distance for regular check-ups. Close to the time of their delivery, the women often relocate to Anchorage or the town of their choice, to wait for the arrival of the baby. This typically means drawing from a large network of extended family living in urban areas. Pregnant women and their families may stay with relatives or friends, sometimes for several weeks at a time, relying on them for help with transportation, meals and other daily needs. This coming and going is part of the ebb and flow of life among extended family and friends.

This flow of assistance across families is a contemporary manifestation of a generations-old tradition of sharing responsibilities. Child care was shared by everyone, even across nuclear families. If a child's parent or parents died, others took on the child as their own.

BELIEF SYSTEMS

Dena'ina spiritual beliefs and meaning systems, like all other cultural information, form a fluid set of ideas that has been passed on through many generations through oral traditions. Dena'ina beliefs bear similarities to other Northern Athabascan beliefs (Nelson 1983; de Laguna and McClellan 1981). Although certain ideas, beliefs and ways of understanding the world are shared broadly among Dena'ina and generally across Athabascan peoples, this does not mean there is a systematized, fully articulated religion or spiritual way among all Dena'ina.

Some of the first written accounts of Dena'ina practices were recorded by Russian Orthodox priests. As Ellanna and Balluta noted, however, such accounts must be used with care since the information recorded was often based upon relatively brief encounters with local peoples, were sometimes based on second or third-hand accounts, and were imbued with ethnocentric biases (1992:287).

Alan Boraas and Donita Peter have worked together to combine information passed on via oral tradition with information reflected in archeological materials (Boraas and Peter 1996).[35] They described some of the basic tenets of Dena'ina spiritual beliefs in pre-contact times. Dena'ina were a people whose livelihood depended on constant interaction with the natural world around them. This meant not only the functional, extractive activities of gathering food and shelter, but also that their surrounding environs were the sites of play and laughter, courtship and passion, disputes and animosity, death and sorrow, and all of the other elements of a rich and meaningful life.

Accordingly, interacting with a world that was alternately abundant and harsh, sometimes unpredictable and always dynamic, led to an understanding of a world that was very much animate and alive. Such a world consisted of animals, plants, rocks, mountains, glaciers and waters that had spirits of their own. "Spirit" may not be the most appropriate term to refer to these beings. In the writings of Peter Kalifornsky and other Dena'ina, the term "person" is often used. This is very significant. The term "person" implies that the living essence in surrounding animals, trees or mountains was a being on par with humans, and not so significantly different from them. "Person" gives the sense that the surrounding, animated world was fully integrated with human lives, and they were not separate from it. This is particularly important to remember as we consider the impacts of first Russian Orthodoxy, and then other Christian religions on Dena'ina culture. These spirits could be capricious, accommodating or forbidding, and oral accounts sometimes reflect the people's efforts to elicit good will from various beings.

> Animated spirits of animals, mountains, plants, and insects populated the Native universe, and people were to maintain constant contact with these "other human beings." This idea made people act as an inseparable part of the natural system. The Dena'ina believed that spirits controlled all living things, the land, and all natural objects. Each river, hill, and lake was endowed with its master-spirits....It was believed that stones, mountains, trees and grass were able to talk with people, and animals were viewed as simply a different kind of people. (Znamenski 2003:4; see also Osgood 1937)

Further, there was an order to this animated world, and proper or offensive behavior that could affect the forces around them. Boraas and Peter described this as follows:

> To be spiritual, for a traditional Dena'ina, involved a quest for a state of *k'ech' eltani* or "true belief" (literally: "belief in things one cannot see") that was achieved by becoming a *k'ech' eltanen* or "true believer." A "true believer" explained and interpreted physical and metaphysical events as the consequence of human attitudes and actions toward a willful nature that was aware of those actions and the beliefs they represented. (Boraas and Peter 1996:184; see also Boraas 2002a)

By dedicating oneself to proper attitude, behaviors and rituals, the Dena'ina believed that they could maintain balance and order among themselves and with other beings around them (Boraas and Peter 1996). If one did something improper, there could be negative consequences. Nora Alexie said that when she went sheep hunting with Pete Koktelash, Pete told her, "If I come up to the sheep and start shooting, do not look at the sheep." Apparently, she did not obey. After Pete shot the sheep, it fell a great distance and the meat was ruined. Albert Wassillie, who transcribed Nora's description, summed it up:

[35] While Boraas and Peter focused mostly on the Dena'ina of the Kenai Peninsula, the overall belief systems are relevant among Dena'ina on both sides of Cook Inlet. Peter Kalifornsky, a key source for this information, was taught a great deal by Theodore Chickalusion in Kustatan, on the western side of the Inlet.

> Sheep hunting was very stric[t], when stalking a sheep high up the mountain, a child—mainly a woman—cannot watch the sheep, some is so high up when it's shot it will fall long ways down. They claim if a woman watch it, it will fall to pieces…. (Nora Alexie 1985)

Additionally, certain members of society developed particular skills in mediating between the lives of humans and the spirits in the surrounding world. James Kari and Alan Boraas briefly identified some of the various practitioners found throughout Kalifornsky's stories.

- *El'egen*: shaman, regular shaman, who responds to *k'ełen ił ch'qghe'uyi* "belief in things one can see"
- *K'ech'eltanen*: "true believer," a person of conviction, who responds to *k'ech' eltani*, "belief in things one cannot see"
- *Quitsitsexen:* "dreamer" who is clairvoyant
- *Yuq' Hdnil'anen:* "sky reader," who predicts the weather
- *Hkut' K' eł' anen:* a practical medical doctor, literally, one who works on the insides, an internist
- *Behnaga Dnadlunen:* "prophet," literally, "the one whose words come true"
- *Gashaq:* a powerful medicine priest figure (this last term borrowed from Alutiiq). (Kalifornsky 1991:9; see also Boraas 2002:9)

Kalifornsky stressed that while shamans and other spiritually powerful figures play is culturally crucial roles, the path they choose can be personally dangerous, and extremely difficult for the individual. He offered a number of accounts of spiritual leaders who battled evil forces and suffered great physical punishment as part of their process of learning to be shamans, prophets, doctors, dreamers or true believers (Kalifornsky 1991; see also Osgood 1937).

Some of these spiritual leaders were healers, using medicines drawn from local plants and other materials. For example, dried red moss was put in a container with hot rocks, and water poured over it to produce steam which was used on wounds. The soft inside of spruce bark was used on fresh cuts for a bandage. Practitioners sealed the edges of a bad cut with runny spruce pitch, then fastened bark over the cut (Mary Hobson 1985). Priscilla Russell Kari captured a great deal of information about the plants used for medicinal and other purposes in *Tanaina Plantlore* (1995).

THE POWER OF *SUKDU*

As mentioned earlier, stories or *sukdu* were important means by which to pass on valuable cultural information, including codes of ethics, and guidance for right behavior. *Sukdu*, usually in allegorical terms, illustrate what the consequences might be for undesirable behavior such as greediness, dishonesty, or being disrespectful of one's elders. For readers unfamiliar with these traditions, Dena'ina stories may seem bizarre and fanciful. Mountains open up at the tap of a cane and animals lie within, as in the story of Telaquana Mountain. In other tales, animals can speak and travel remarkable distances, dead animals come back to life, people become animals and vise versa, effigies or small bits of skin or hair can take on tremendous symbolic powers. While many Dena'ina *sukdu* transmit history, teach proper and improper behavior, and warn of potential dangers and evil, others may simply be whimsical tales, stories for the sake of entertainment, or "pointless" stories to punish inattentive listeners (de Laguna 1995:286; Jetté 1908-9:300-302). Further, the lesson or moral of some of the stories, or their allegorical intent, may be lost on those from outside Dena'ina traditions.

Alan Boraas and Donita Peter suggest that the tradition of burning of animal bones after the animal was killed, processed and eaten is attested to in archeological sites where it is rare to find animal remains (Boraas and Peter 2005). Further, testing of the substances found in fire pits confirms bone residue. Dena'ina people say they burn bones, or put the bones of fish and whales back into the sea, in order to send the animals on to the next life. In practical terms, the custom meant that the bones did not attract scavengers, and that camps were kept relatively clean. Symbolically and spiritually, however, the intent ran much deeper.

Guided by principles, the Dena'ina had a strong sense of how to tread properly in the natural world, and how to treat one another. For example, if people gathered dentalia shells, they had to leave something in return, or they might get caught in fog (Ruth Koktelash 1981). Several renderings of the story "The Girl Who Said What She Shouldn't" have been recorded; one version is told by Mike Delkittie in Stickman et al. 2003. The account as told by Ruth Koktelash is as follows:

In the spring of the year when it's like this,
when the first fish comes upriver,
They watch their children.
The older people told them not to talk about things.
They got the first salmon and then they cooked it.
They dished some fish out for the children.
They took it out on the riverbank, and started eating.
Qeshqa means rich man or the head of the people...the chief.
His daughter was saying things.
She was saying, "Oh this plant which she calls *ch'deshtleq'a* (fireweed),
it's not alive like us,
and I wonder if it's happy too."
That girl, she was kicking it around and possibly broke it down.
After they ate, they went back inside.
Then, it started getting dark.
Then it started to rain.
It rained and rained and rained.
Then the next thing they knew, it started snowing.

And the rich girl's mother said,
"No, you're not going to kill that girl.
Let her take a different one.
Take one of the slave's children.
Take each child and kill them,
and take them outdoors and cut them open
and turn them over towards where the wind was coming from."
Still the storm never quit.
They kept doing that, one child after another
and then it just kept on snowing.
So they said, "Well, there isn't much we can do.
I don't think we'll all survive.
So they took her out and then her mother gave her a bath
and put bead covered clothes on her.
Put a bead necklace around her neck,
braided her hair, and she put bead covered shoes on her feet,
and then they took her out.
And then they killed her.
They cut her open and hung her up outdoors
and then went back inside.
And then it got calm.
It got real calm and quiet.
And then the night went by
and in the morning, the morning was real good.

The sun was shining.
This happened just because a little girl was saying things she shouldn't be saying,
about a white moss called reindeer moss.
This is why children should never talk about things they don't know about.
Anything, like plants, flowers or birds.
(Ruth Koktelash 1981)

The story illustrates the dire consequences that can follow if a person fails to respect the natural world.

POST-CONTACT BELIEF SYSTEMS

Imagine the clash of worldviews that occurred when Dena'ina came into contact with Russian trappers and traders. Suddenly, people focused on intensive extraction of fur-bearing animals, bearing the weaponry to extract labor and goods forcibly if need be, entered into the Dena'ina world. Boraas and Peter suggested that while there was some breakdown in belief systems following contact with Russian and Euroamerican cultures, Dena'ina also continued to use their traditional cosmological foundation to assess and adapt to new cultural and religious ideas (Boraas and Peter 1996).

Russian Orthodox missionaries had difficulty comprehending the complex and subtle belief system of the Dena'ina; they assumed that the Dena'ina had no religion comparable to Russian Orthodoxy. Znamenski speculated that their flexibility and relatively easy adaptation to shifting natural and cultural conditions around them meant the Dena'ina might fairly readily experiment with other cultural practices (see also VanStone 1974, Townsend 1970:60).

> ...[T]he Dena'ina believed overall that the meaning of existence was already given and the purpose of religious practice was to sustain or restore the equilibrium inherent in nature. For this worldview, the most feared thing was the fragmentation of the existing order, which disturbed the existing balance. (Znamenski 2003:4)

Orthodox beliefs, rituals, and annual holy days became integrated into the rhythm of Native life. Dena'ina hunting and fishing migrations came to be organized around events at the church such as Easter and Christmas. The depth of this integration can be seen in people's everyday prayer and belief systems, and evidence is recorded in such stories as "The Kustatan Bear."

Peter Kalifornsky related this very powerful and complex story in his collected writings (1991). An historical account of the 1890s, the story conveys conflict between various shamans at Kustatan and further up the coast. One shaman changes form, and one becomes a large brown bear that attacks villagers in Kustatan night after night. Finally, only bullets that have been blessed with holy water succeed in killing the bear. The story includes elements of traditional Dena'ina belief systems, as shamans battle on behalf of their communities, as well as the power of Russian Orthodox religion and its integration with existing Dena'ina beliefs (Kalifornsky 1991).

The funeral of Ruth Koktelash in Nondalton in 1987 was another example of religious syncretism. Andrew Balluta carefully describes how clan relations were observed in preparations for her funeral, which consisted of a Russian Orthodox ceremony at the church, followed by a big potlatch at the community hall. Relatives and friends from Lime Village, Nondalton, Iliamna, Pedro Bay, Newhalen, Kokhanok, Chekok Point, Port Alsworth and Anchorage gathered together. A complex set of clan relationships determined who would prepare the body for burial, who would make the cross and the cover for the casket, and who would perform other tasks. Women prepared food, and the potlatch continued for forty days (Andrew Balluta 1987).

Another example is a story collected by Julia Krenov called "Markarka—The Sooktoo—The Conjuror." Alexandra Longcarp relayed an account of her mother's terrible headaches, which her grandmother and great-grandmother also suffered. Markarka, a shaman, came to help heal her. He placed a glass of clear water on the table in front of a Russian Orthodox icon, and prayed to the icon. The water changed to a deep red color, and with it, he healed her as well as her son, who had an infection on his leg. In a similar fashion he cured the (non-believing) priest of facial sores, and others as well. Because "Americans believed Markarka lost his mind," he was sent to Seattle to an insane asylum or a hospital. "But we all thought the man had been normal and had never done any harm to anyone" (Krenov 1951:177-179).

Yet another example of the integration of Dena'ina and Russian culture and religious thought is reflected in the Evan Dorak story, a Russian folktale re-blended with Dena'ina oral traditions. A king or "Ushudari"offered the challenge that the young man who could get his horse to jump "up on his porch" could marry his daughter. Evan Dorak was a poor, adopted boy who followed his dying father's wishes to pray with him at his death. The dead father gave Evan Dorak instructions for how to obtain a remarkable horse that did indeed carry him up to the porch of the kingdom, enabling him to marry the king's daughter and eventually take over the kingdom. In this story, the humble, obedient and prayerful boy triumphs over all others (Antone Evan 1981).

Some of these accounts capture the fusion of Dena'ina traditional beliefs with the introduced Russian Orthodoxy. At some point, Russian Orthodoxy became integrated into Dena'ina culture and became almost considered an "indigenous" religion. "The truth was that the Dena'ina, who embraced Orthodoxy, creatively adjusted Orthodox beliefs for their own needs and even adopted Russian church brotherhoods as part of their social and political structures" (Znamenski 1999:96). Or, as Znamenski states elsewhere,

> ...[O]rthodoxy became a part of Dena'ina spiritual legacy. Integrated into indigenous tradition, Orthodoxy turned into popular Christianity...By the turn of the twentieth century all Dena'ina were considered Christians and eventually started to view Orthodoxy as their native religion. (Znamenski 2003:1)

To speak of belief systems among the Dena'ina over the past several generations is to speak in the plural. It is not possible to hold up a single religion, or a shared set of beliefs among all Dena'ina. Even within a single village, there may be a range of diversity in terms of what convictions people adhere to with regard to the supernatural.

Belief systems offer ways to organize and make sense of the world. When radical social changes alter usual points of reference, new religious elements may be added in to help people formulate responses to a changing world. Oral traditions also may be altered as these new elements are woven into Dena'ina belief systems. However, some of the basic vehicles, such as *sukdu*, remain as a form for transmitting cultural values. Leadership roles may shift and adapt, gender roles may be adjusted to respond to new economies and social dynamics with outsiders, and even intergenerational relationships may shift as young people look to new authorities outside of Dena'ina culture for guidance. Despite these transitions, strong family and community ties—grounded in connection to the land—have been an important source of continuity and cohesion through generations of rapid change for Dena'ina people.

CHAPTER SEVEN
Language and Identity[36]

Before the arrival of non-Natives, more than 75,000 Natives lived in Alaska. These people differed widely, spoke more than 20 different languages, were adapted to as many ecological niches as Alaska's environment could support, and were divided into several hundred societies consisting of members of closely related family groups. Their personal identity reflected the society into which they were born. They did not identify themselves as Alaska Natives and only in very specific contexts—such as contacts with speakers of another language—did they see themselves as Tlingit, Athapaskan, Aleut, Inupiat, or Yup'ik. Their primary allegiance was to their families and tribal groups…Genetic heritage did not carry the same weight as it does today in the recognition of an individual as an Alaska Native. Language, family membership, and local residence determined personal and group identity (Fienup-Riordan 1992).

Photo 38. Nickoli Balluta and Liz Balluta lead others in learning songs and dances at Nondalton Culture Camp, 2004. Michelle Ravenmoon photo.

[36] This chapter is adapted from an article co-authored by Karen Gaul and Gary Holton for *Alaska Park Science* (Spring 2005).

DENA'INA IDENTITY

What does it mean to be Dena'ina? For contemporary people who identify themselves as Dena'ina, it can mean many things. In the face of a rapidly changing cultural environment over the last few centuries, factors that contribute to people's sense of Dena'ina identity have shifted, too. Before contact with other non-Native cultural groups such as Russians and Anglo-Americans, Dena'ina speakers had a sense of identity distinct from (and sometimes in conflict with) Yup'ik speakers to the south, However, as Fienup-Riordan suggests, a sense of Dena'ina cultural unity probably was not as solid in the pre-contact era as it is today.

Before contact, Dena'ina communities spoke related dialects, traded, intermarried, and interacted in other ways, but their communities were somewhat independent. The contact experience solidified a broader sense of Dena'ina identity (Townsend 1965). It was only after the disruptions of Russian and American colonization, epidemic diseases, changes in subsistence patterns, and consolidation in permanent villages that the Dena'ina began to think of themselves as part of a single classification, "Dena'ina" (Znamenski 2003:3). In the face of a new and overwhelming "them," a stronger sense of the Dena'ina "us" emerged. In whatever ways the Dena'ina forged a sense of identity with one another, surely language was a central lynchpin for how they understood themselves and their world, and how they related to one another.

Today, beyond ties connecting them to other Dena'ina speakers, Dena'ina people also understand themselves as part of a number of broader umbrellas, or layers of identity. They invoke different levels of shared identity, depending upon the circumstances. This process, also known as "situational identity," is employed by people everywhere. We invoke changing identity markers, depending on the situation. Dena'ina people may identify primarily with their family or home village, such as Nondalton. They may also identify with others in their specific region, such as the broader Lake Clark-Eastern Iliamna area, who share a similar history as well as a common linguistic pattern. They see themselves as Dena'ina, and celebrate what they have in common with others on both sides of Cook Inlet, and into the Lake Clark and Iliamna Lake region interior. At times they may feel a sense of connection to all Athabascan tribes extending down through Canada, the northwest of the United States, and into the southwest region, including Apache and Navajo. In recent decades, a number of Dena'ina have traveled and visited with Navajo groups, and are struck by similarities in language and culture. They may identify with other Native North Americans, or perhaps with indigenous people of both North and South America. On a global scale, as Native people, they may at times align themselves with all indigenous or first nations groups around the world. This broadening of their sense of cultural identity is perhaps especially important in a world where indigenous people from around the world work together on issues of land rights, education, health care and other issues. It is not unusual, for example, for Maori from New Zealand, or Native Hawaiians to join Dena'ina and other Alaska Natives in transcultural events.

The Dena'ina language belongs to the Athabascan language family, which is comprised of some forty languages spread across Alaska, parts of Canada and parts of the northwest coast, California and the southwest of the United States (Krauss and Golla 1981). Linguist Michael Krauss suggests that contemporary Athabascan languages probably diverged from a more unified Proto-Athabascan language about 2,000 to 2,500 years ago, possibly from a location in what is now eastern Alaska and western Canada, in the southern Yukon (1980:11).

Speakers of the Dena'ina branch of the language family have historically lived in the areas wrapped around Cook Inlet, but differences in pronunciation and vocabulary have developed into dialects correlated with particular regions. Lake Clark National Park and Preserve lies at the heart of Inland Dena'ina country, one of four dialect areas (Kari 1975; Kari and Kari 1982:11-12; see Figure 2 in the Introduction). The Upper Inlet Dena'ina dialect stretches as far north as Denali (or *Dghelay Ka'a* in Dena'ina), and the Outer Inlet dialect includes both the west and east coasts of Cook Inlet, stretching

across most of the Kenai Peninsula. The Dena'ina spoken in the region of Pedro Bay and Old Iliamna comprises a fourth dialect (Kari 1982; Russell Kari 1987; Kari and Fall 2003:10).

Spoken Dena'ina, like all other Alaska Native languages, was severely compromised through the contact experience, although this process intensified after the introduction of American educational policies. During the earlier period of Russian interaction, many Natives learned some Russian, and integrated Russian loan words into their languages. Krauss noted:

> All known Alaska Native languages thus survived the Russian period, although in the areas of strongest Russian influence their traditional cultures were profoundly affected by trade and especially by Orthodox religion. In surviving the Russian period, several Alaskan languages were in fact strengthened by the development of literature and literacy. (Krauss 1980:17)

During the last decade of the nineteenth century and the first decade of the twentieth, a more intensive influx of Americans due to the gold rush, canning and mining industries meant more of a demand for spoken English through trade, churches and schools (Krauss 1980:19).

Presbyterian missionary Sheldon Jackson served as the first Commissioner of Education for Alaska, from 1885 to 1908. Jackson's language policy was that English should be used exclusively and Native languages forbidden in schools and in churches. Beginning in the 1880s official U.S. educational policy banned all use of Alaska Native languages in schools (Alton 1998). Like Dena'ina, most of Alaska's indigenous languages are severely threatened today as a result of this history. The removal of children to residential school furthered the process of severing the transmission of Native languages from generation to generation.

In addition to administering education in Alaska, Sheldon Jackson also initiated reindeer herding as a rural development program. Under Jackson's administration, in 1905, H.E. Redmyer started the reindeer station between Old Iliamna and Kokhanok, and also became a teacher for the area (Townsend 1965:324) (see Reindeer inset in Chapter 5, above). The school at Old Iliamna was established in 1908 and operated under the direction of the Bureau of Education until 1926. Through schools and through other commerce and work activities, Dena'ina people were encouraged—and children were indeed sometimes forced—to learn to speak English. Commercial fishing in Bristol Bay also demanded some knowledge of English (Townsend 1965). Elders and adult Dena'ina people of today remember the sense of shame and fear that was associated with speaking their language under these conditions.

After years of forced English usage and punishment for use of the Dena'ina language, combined with tremendous other cultural, technological and economic change, contemporary Dena'ina people face a serious challenge in reclaiming their cultural identity. As anthropologist Alan Boraas has noted, forced assimilation over generations stifled many Dena'inas' interest in their Indian heritage (Boraas in Kalifornsky 1991:474-475). While some elderly people have managed to hang on to their knowledge of the language, others lost touch with it. Some people can follow conversations and understand Dena'ina, but never really learned to speak it.

There have been a number of efforts over the last several decades to record and preserve Dena'ina language and culture. As James Kari summarized it, only a dozen or so vocabularies were recorded prior to 1970. During the 1970s, James Kari and Joan Tenenbaum conducted intensive linguistic field research (Kari 2004:4). Schools in Tyonek, Nondalton and Pedro Bay offered Dena'ina programs. In the 1970s and 1980s, Peter Kalifornsky and Albert Wassillie, who learned to write Dena'ina, recorded a great deal about their lifeways and culture. Alan Boraas began teaching Dena'ina language classes at Kenai Peninsula College in 1989. James Kari continued to work on many different research projects, and to collect Dena'ina recordings.

Although only a handful of people currently speak Dena'ina fluently, growing numbers are interested in learning the language. And whether they speak it, are struggling to learn it, or have forgotten a great deal over the years, many Dena'ina continue to view their language as a central part of their Dena'ina identity. In recent decades, many Dena'ina people have been reclaiming what they can from their complicated and sometimes destructive history, and celebrating strands of continuity from their cultural heritage.

LANGUAGE REVITALIZATION

> Languages are more than just practical systems of communication. Each is also a creation of beauty, through the collective and creative spirit of countless generations of our ancestors, with spiritual and emotional values unique to the identity of each society. (Krauss 1995:5)

Some twenty years ago, anthropologist Linda Ellanna predicted that Dena'ina would become a dead language (Ellanna 1986:3-5). Such a prediction is fairly ominous (see also Krauss 1980). Whether Dena'ina can be revitalized into a widely and actively spoken language is an open question, but it is a hopeful sign that increasing numbers of Dena'ina as well as non-Native people are applying themselves to Dena'ina language study.

Several years ago, Pauline Hobson, a Dena'ina woman with an MA in education, began asking how Dena'ina people might more actively work on Dena'ina language revitalization. Some interested members of the community approached the Alaska Native Language Center, and their efforts to preserve their language have been multiplying ever since.

Photo 39. Mary Hobson (right) and Sondra Stuart at the 2003 Dena'ina Language Institute in Kenai. NPS photo.

Photo 40. Participants in the 2005 Dena'ina Language Institute in Kenai. NPS photo.

Much of the initial work of language revitalization involves bringing together speakers and learners. Learning a second language takes an uncommon level of commitment. The task is difficult enough when—as with many world languages—the learning process is reinforced and supported by textbooks, reading materials, media, and large speaker communities. In the case of Dena'ina, few materials were initially available, and there is no large community of daily speakers of the language. Because the Dena'ina language area spans a vast territory which includes both urban areas such as the Anchorage basin, and remote rural areas such as the Stony River drainage, connecting people across this geographically diverse region is particularly challenging.

In May 2003 the Kenaitze Indian Tribe hosted the first Dena'ina Festival on the Kenai Peninsula. This event drew speakers from across all the Dena'ina regions and dialect areas to discuss the prospects for language revitalization. More than 100 people attended. The festival was followed by a three-week Dena'ina language course held at Kenai Peninsula College and sponsored by the University of Alaska Fairbanks. One of the important outcomes of the festival and the language course was the bonding between speakers and learners. Speakers were encouraged by the presence of interested and dedicated students, many of whom had long been eager to learn but lacked a teacher who shared their enthusiasm. Over the following year, as part of a U.S. Department of Education Project, participants traveled periodically to additional workshops to teach and learn from one another. The number of Dena'ina learners at the 2004 summer Dena'ina Language Institute grew from 10 the previous year to 40; and at the 2005 Institute there were 50 registered students, including many more young people. The Dena'ina Language Institute continued in the summer of 2006 as well.

At the Dena'ina Language Institute, elders served as language mentors for learners, even across some distances. Gladys Evanoff, a mentor, said that the process was going well for her.

> [This work] is making [the language] come back for me. I kind of forgot, since I've been away from my Grandma for so long. I can understand everything, but learning to speak is more difficult. It's helping me to come back to where I started. (Gladys Evanoff, personal communication 2004)

Ongoing meetings provided crucial contact between all those involved in language revitalization efforts. In order to maintain such contact after the summer institute, some people continued to hold regular meetings by audio-conference. The Alaska Native Heritage Center in Anchorage began to offer classes in Dena'ina.

In addition, two new language study grants have been awarded recently to the Dena'ina people. The Alaska Native Heritage Center has implemented the *Dena'ina Qenaga Hunuhdulzex* ("the Dena'ina Language is coming back") program, a project funded by the U.S. Department of Education. The Kenaitze Indian Tribe on the Kenai Peninsula received significant funding from the Administration for Native Americans through the Department of Health and Human Services. Each program developed curricular materials and archives from existing Dena'ina materials.

In addition to the language institutes, classes and other initiatives, Dena'ina people continue to come together to reaffirm their culture. Culture camps are organized for young people in the summers, and elders come to share songs, dances and stories. Dance groups thrive in a number of communities. And people continue to gather at potlatches to celebrate births and marriages and to commemorate those who have passed on. All of these events, along with the regular work of subsistence practices and living close to their natural resources, reaffirm people's sense of Dena'ina identity, even as it also evolves.

Photo 41. Nickoli (Harry) Balluta with dentalium and drum at culture camp, 2004. Michelle Ravenmoon photo.

Photo 42. Mary Delkittie and Marilyn Balluta weaving birch bark baskets. Michelle Ravenmoon photo.

INSTITUTIONAL SUPPORT

A number of initiatives over the past several decades have contributed to the recording, compilation and storage of materials in Dena'ina that are now used by language learners. A project at the University of Alaska Fairbanks has been creating digital access to Dena'ina materials housed at the Alaska Native Language Center (ANLC). The ANLC maintains a comprehensive collection of nearly everything written in or about the Dena'ina language. This collection ranges from some of the first written materials, such as the Dena'ina word list William Anderson collected on Cook's 1778 expedition (Beaglehole 1967), to field notes from linguists who have worked with the language over the past 50 years, to recently developed curricular materials. In addition, the collection includes more than 200 audio recordings of stories, songs, and linguistic material.

The Dena'ina Archiving, Training and Access (DATA) project helps to make all of these materials accessible. As a collaboration between ANLC and the LinguistList, a leader in the field of digital language documentation based at Eastern Michigan University, this project has applied cutting-edge techniques to the creation of an enduring collection of Dena'ina documents and recordings. The result is a searchable archive of texts and recordings which serves as an additional resource for those wishing to learn more about Dena'ina language and culture. Annual workshops train community members in the use of the archive so that it can continue to expand as a dynamic resource well after the project is completed.

As a result of many combined efforts centered at the ANLC, a website dedicated to the Dena'ina language has been developed. The Dena'ina Qenaga website (http://qenaga.org/news.html) offers language lessons that include translations, transliteration and audio. It provides information on grammar, spelling and the writing of Dena'ina. Dena'ina speaking elders are featured in brief biographical sketches. The website also contains lists of available materials such as recordings, transcripts and other documents.

In conjunction with this multifaceted National Park Service ethnographic project in 2004 James Kari worked to inventory and catalogue into one database all existing audio recordings in Dena'ina. This included accounting for recordings held in National Park Service archives as well as those at the Alaska Native Language Center, in the archives of the Bureau of Indian Affairs, in individual collections and elsewhere. Kari inventoried around three hundred and fifty different recordings. The Dena'ina Audio Collection is an important step in taking stock of what is available in Dena'ina, and contributes to further use of the recordings in revitalization programs and future research. James Kari also spearheaded an effort to update and make usable a bibliography of materials related to Dena'ina, and the greater Cook Inlet area. Alan Boraas and others contributed to its completion, and it is now posted on the Qenaga website.

The Lake Clark Cultural Resources Management program also supports James Kari in gathering vocabulary for dictionaries and related educational materials (Kari 1994). James Kari, along with James Fall, has tracked down hundreds of Dena'ina place names throughout the region, built maps, and tied the names to stories, families and their seasonal use patterns. Kari and Fall's work has been gathered together and published in *Shem Pete's Alaska* (Kari and Fall 2003). In interviews with Nickoli Kolyaha, Kari learned about some of the beautifully descriptive names of the Lake Clark and Old Iliamna areas such as "the fish swim up climbing" (*Diqak'ghileha*), "upon it we paint ourselves" (*Veq'Nuhuch'nashchigi*), and "the one in the timbered valley" (*Taq' Nust'in*) (Kolyaha1999). Lake Clark National Park and Preserve has continued this work by entering place names into a database, creating maps, and compiling a cultural atlas.

In the late 1990s, Project Jukebox, a joint project between Lake Clark National Park and Preserve and the Alaska Native Language Center, compiled interviews of elders, photos and maps into an interactive CD-ROM. Viewers can listen to elders speak on various topics, describe contents in photos, and be guided through trails on a map. Elders also offer Dena'ina words for various places and objects. These interviews also contribute to both cultural and linguistic preservation.

Photo 43. Nickoli Balluta and James Kari at microphone. Karen Gaul photo.

Peter Kalifornsky, a Dena'ina elder, worked with James Kari, Alan Boraas and Priscilla Russell to record Dena'ina culture and history. Together, they produced a collection of Kalifornsky's writings called *A Dena'ina Legacy: K'tl'egh'i Sukdu* (1991). Kalifornsky, who lived on both sides of Cook Inlet over the course of his life, writes this about education of the young:

> They should be aware of the old people and retain all of their language work.
> They should learn without writing....
>
> Study the words, the remaining words,
> and all the different songs,
> And the place names that they made long ago.
> And they should compare all the living things,
> how living things grow. (Kalifornsky 1991:7)

More recently, a new collection of stories by Walter Johnson, a Dena'ina elder from the Kenai Peninsula, was produced by James Kari and the Alaska Native Language Center, and was supported by the National Park Service (Johnson 2004).

The recordings of oral narratives in Dena'ina capture the most valuable linguistic resource of all: spoken Dena'ina, with all of its idioms, rhythms, playfulness, and beauty. These recordings are used for instructional materials in emerging Dena'ina language programs. The narratives' details about traditional use of plants, birds, fish and other animals offer a cultural and environmental context for students of the language.

All of this information contributes to the development of Dena'ina language learning materials. These efforts also reflect a number of important Park partnerships with Native elders, researchers, other institutions and Native groups.

Many teachers and students of Dena'ina are hopeful about the future. One instructor, Marilyn Balluta, says,

> Now it's looking even better. For a while there Dena'ina language was hardly ever spoken, except for [by] a few elders. There was no interest in learning it. But now there is a lot more interest in learning our Dena'ina language, and I just hope it continues like that. (Marilyn Balluta 2004)

Dena'ina language revitalization, according to linguist Gary Holton, is an achievable goal. Revitalization can take many forms, but in all cases it requires a strong commitment from within the community. And community effort like that among contemporary Dena'ina in Southcentral Alaska may just be what it takes to bring back into flourishing use an almost lost language. Through ongoing collaborative efforts, institutions such as the National Park Service, the Alaska Native Language Center and others can support this effort by providing access to research, documentation and recordings of Dena'ina language. Communities can see archives as repositories of the words of their elders, holding resources that can help to build and develop language and culture in creative and dynamic ways that will be sustainable in a rapidly changing world.

IDENTITY, SUBSISTENCE AND THE LAND

The Dena'ina language, spoken by Dena'ina Athabascans in Southcentral Alaska, is one that arises from the land. Place names are often a lovely literal and poetic mix of details that make a place what it is. As noted earlier, in a land of low sun, in the absence of maps or compasses, it is riverways that guide people's courses of travel over the land, and serve as markers.

> ...[T]he Dena'ina have an entire lexicon with which to describe kinds of streams and trails. It makes a difference if a stream is a river, a tributary, the outlet of a lake, a straight stretch of water, a place of fast or slow current, covered with slush ice or overflow ice. Likewise a trail is not just a trail; it's a packed-snow trail or a trail with snow drifted over, an animal trail, a snowshoe or sled trail, a trapline trail, or a trail used for getting wood. (Lord 1996; see also Kari and Kari 1982)

In the many dozens of oral histories held in the Lake Clark National Park and Preserve Collection, Dena'ina people described in great detail not only hunting and fishing practices, but the many tools, implements, items of clothing, sleds, snowshoes, vessels, and decoration they made from materials found in the country around them (as summarized in previous chapters). We can see direct ties between people's subsistence way of life and the way they talk about the seasonal rhythm of fishing, trapping, hunting and gathering in oral histories of decades past. These ties between subsistence practices and people's sense of identity as Dena'ina are still evident today. In recent interviews, when people were asked what they thought it means to be Dena'ina, they did not respond with lofty philosophical ideas. A common response was that being Dena'ina meant interacting with the land and its resources through subsistence practices.

> ...[O]ur people...they go hunting moose...and cut 'em and dry them and put it away...The women's go and pick berries and...put them away for winters. Sometimes they try to put fish, you know...down in the ground... they put fish down there. So in the winter they dig down and they're fresh. (Helen Dick 2004)

It is important to recognize this relationship between language, subsistence practices, and identity. Oral accounts of elders and others show us not just a window on the past, but forge a present-day link to identities and attachments, helping us understand connections between contemporary Dena'ina and their ancestors.

CULTURAL CHANGE

Dena'ina elders of today have seen great changes in their lifetimes. They have seen changes in technologies from the introduction of off-road vehicles, to household appliances, to internet connection in their rural homes. Such changes may seem like helpful additions to assist in traditional subsistence practices, or lighten the work load. Gladys Evanoff remembered,

> When we were small we didn't know the difference that we had to carry water, chop wood and light the lamp. We didn't use a gas lamp, anyway, we just used any kind of light we had. We were poor. And we were happy. No, we didn't know the difference. Until I got married, it was a lot different. Then we started getting all this stuff, phones and lights and washers and dryers and running water, and all the modern stuff. Microwaves and electric coffee pots and propane stoves. (Gladys Evanoff 2004)

In addition to the more superficial technological changes, however, Dena'ina have also endured a deeper internal transformation that included a forced denial of the very building blocks of their sense of self: their language, and cultural values and beliefs.

For elders and other adults who were punished for using their own language, and for younger generations now studying it, the act of reviving and celebrating their language is deeply significant. The language study sessions can become very emotional for participants. This is partly due to the power of connecting with other Dena'ina people from all over the region, and partly due to the deeply symbolic nature of reclaiming their language after suffering such devastating efforts of cultural annihilation. To reclaim language—perhaps through learning and teaching long-forgotten stories, songs, and nursery rhymes—is an important step in self-determination and recovering a strong sense of Dena'ina cultural identity.

It is a painful experience for the entire community when Dena'ina elders pass away, for their knowledge—not only of the language, but of the old ways of doing things—is also lost. But thanks to the tireless work of so many elders who take on the role of chroniclers for their culture and language, and so many people of all ages who have sat down to record interviews over the years, a substantial legacy remains. Fortunately, there is a powerful force of energy to preserve and carry on that legacy.

Whether they are in their eighties, fifties or twenties, Dena'ina of all ages have seen a great deal of cultural change in the past several decades. In the face of massive mining operations moving into the area, including road systems, power sources and infrastructure where before there were none, people will need to think clearly about the priorities and values at the heart of their cultural identity now more than ever.

For a people whose identity has been tied to the land and its resources, unprecedented changes could lie ahead. Should the enormous Northern Dynasty gold and copper mine and related development carry forth, Dena'ina children, teenagers and young adults of today will be able to look back and remember a land that was open, natural, and while extensively used by humans for subsistence purposes, still relatively undeveloped. They will be able to remember a sense of relative isolation and quiet. Despite the increased airplane and boat traffic over the years, without road access, Dena'ina have been able to preserve a sense of direct connection to their surrounding lands.

Developing a mining complex in the area will mean that their children will grow up knowing a new reality that includes roads, increased traffic of people and goods into the area, new businesses and new housing. Such changes will bring loss in terms of traditional practices, but also cultural adjustments and reinvention. The Dena'ina language revitalization efforts could be an important line of continuity.

Although the National Park Service works to record and preserve archeological sites, historic structures, cultural landscapes and ethnographic resources, one of the most significant cultural resources for the Dena'ina is not a site, structure or object. It is their language, with all of its subtle and complex meanings. Just a generation or two ago, there were no audio or written recordings of Dena'ina. Like all other languages and cultural traditions for the vast majority of human experience on earth, it was stored in people's memories and orally passed on. The National Park Service, among many other organizations and individuals, has played a key role in supporting research projects that have focused on recording and gathering interviews in the Dena'ina language. This work must be continued. Whatever changes may be in store for Inland Dena'ina, holding onto and strengthening their language, and the cultural heritage that is embedded in it, may serve as an essential anchor in the face of the changes that lie ahead.

Sunset through the grass on Lake Iliamna.
Photo by Erin McKittrick.

CHAPTER EIGHT
Multiple Uses, Multiple Meanings[37]

LAYERS OF CULTURAL SIGNIFICANCE

In the Lake Clark National Park and Preserve region people have interacted with the land and water in multiple ways and imbued them with meaning. Dena'ina subsistence activities and other cultural practices have changed over their long history of use. As new groups have moved into the area, new meanings have been formed. Greider and Garkovich used the term "landscape" to describe the cultural meaning attached to particular lands. According to those authors, landscapes are "the symbolic environments created by human acts of conferring meaning to nature and the environment, of giving the environment definition and form from a particular angle of vision and through a special filter of values and beliefs" (1994:1). How people assign meaning to and interact with a particular environment is closely tied to their sense of individual and collective identity (Yung 2004:49).

Cultural resource managers in the National Park Service are interested in identifying associations people have from living closely with the lands that are now park lands, and the meanings they have assigned to or derived from their environments. In the most basic terms, this can mean identifying sacred sites and places of cultural and spiritual significance. It can also mean initiating place-name studies to show the ways cultural meanings are inscribed on the landscape by naming and talking about places.

However, identifying culturally significant meanings within a particular landscape can prove a challenging undertaking, especially since people move away, different people move in, and new layers of meanings are applied, or laid over the landscape. We can then begin to consider not simply the traditional use, associations and meanings of an area, but multiple layers of such associations, meanings and use.

The National Park Service has come to address cultural landscapes or ethnographic landscapes through the Cultural Landscapes program, begun in 1990. In a recent volume on Northern Ethnographic Landscapes, the editors endorse this definition of an ethnographic landscape:

> ...a place valued by an Aboriginal group (or groups) because of their long and complex relationship with that land. It expresses their unity with the natural and spiritual environment. It embodies their traditional knowledge of spirits, places, land uses and ecology. Material remains of the association may be prominent, but will often be minimal or absent. (Krupnik, Mason and Buggey 2004; see Buggey 1999:27)

The Cultural Landscapes Program offers us valuable tools for identifying and documenting landscapes of cultural significance. One such tool is the Cultural Landscapes Inventory, or CLI. In Lake Clark, two Cultural Landscapes Inventories studies have been completed. One is for the Telaquana Trail, a travel corridor commonly used between *Qizhjeh Vena* (Lake Clark) and Telaquana Lake by Dena'ina people and later in the 1900s by Euroamerican homesteaders, miners and trappers. The other addresses the Kijik Archeological District and National Historic Landmark, a major Dena'ina village site that was once the southern terminus of the Telaquana Trail.

However, as has been apparent through the course of this research, our maps of the Lake Clark region are covered with Dena'ina names, with passes, travel routes, portages, hunting grounds, fish camp areas, clamming areas, trapping camps, berry picking areas, villages, and many uses and understandings. Identifying only two important cultural landscapes is potentially fairly limiting if the inventory is not more thorough. It is a good thing that the National Park Service is assessing these two culturally significant areas for the Cultural Landscapes Inventory, but almost all of the surrounding areas are also used and valued landscapes.

[37] A version of this chapter was presented as a paper at the 2005 annual meeting of the Society for Applied Anthropology in Santa Fe, New Mexico.

Furthermore, as discussed in previous chapters, in addition to the Dena'ina and Yup'ik associations to the Lake Clark area, new layers of significance came from Russian *promyshlenniki* (fur entrepreneurs), who made their way into these interior areas by the 1790s. These newcomers perhaps read the land as bountiful, rich in resources, and full of opportunity to make good money. It was a place from which to extract resources. The Dena'ina participated in fur trade endeavors and served as middlemen, facilitating the extraction and transport of fur animals from interior areas into the trade routes that started in local trade posts on Lake Iliamna, for example, and ended up in far away fashion shops in London or Moscow. Jointly, they recrafted new sets of meanings on the landscape. Similarly, when gold prospectors entered the area, setting up staging camps at the Port Alsworth area for exploration in interior areas, some Dena'ina assisted and participated in gold prospecting as well. Commercial fishing and canning entered the area in the 1880s, around the same time as gold prospecting. The commercial approach to fishing was on a scale thousands of times larger than subsistence fishing, but it offered local people an opportunity to earn cash and to take part in a cash economy. Many Dena'ina continue to participate in the fishing industry today.

Through these early interactions, Dena'ina people and some of the Russian and American newcomers married, had children and built family and community, merging cultural backgrounds, lifeways, and sets of understandings of place. As trappers, traders, prospectors, and explorers moved into the area, names in new languages were assigned over Dena'ina place names (see Figure 2).

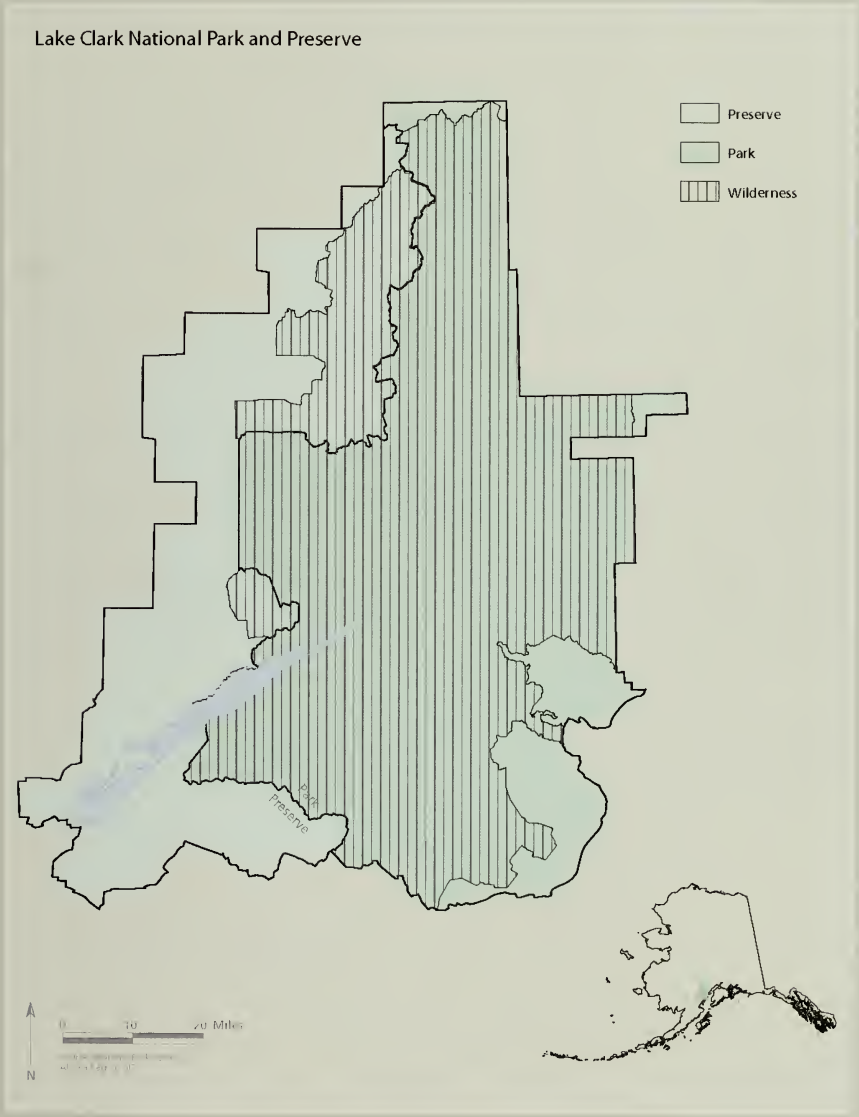
The many years of treaties and legislation that followed these early interactions imposed other new meanings, and new rules about basic land rights, to the land. The Alaska Native Claims Settlement Act (ANCSA) of 1971, extinguished aboriginal title to 365 million acres of land, conveyed 45 million acres to Native corporations, and paid out $962.5 million to Native corporations (Case and Voluck 2002). The Alaska National Interest Lands Conservation Act (ANILCA) of 1980 identified new federal lands in the form of National Parks and Preserves. Lake Clark National Park, as mentioned, is one such new "ANILCA" park. The Wilderness area of LACL was also created within ANILCA. There are 2,470,000 acres of Designated Wilderness in LACL. ANILCA also helped to designate village and regional corporation lands, and so on.

National Park, Preserve, and Wilderness designations can themselves be viewed as additional layers of significance applied to this area, as suggested in the Introduction to this volume. Federal legislation defines wilderness as "an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain..." (The Wilderness Act, 1964). Wilderness lands are to be administered

> for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use as wilderness, and so as to provide for the protection of these areas, the preservation of their wilderness character, and for the gathering and dissemination of information regarding their use and enjoyment as wilderness. (The Wilderness Act, 1964)

Even though the lands in and around Lake Clark National Park and Preserve have been used by people for thousands of years, their designation as wilderness—with its lure of a vast, wild area—is what draws many visitors to Lake Clark National Park and Preserve every year. Visitors come to the Park and Preserve to experience such activities as river running, backpacking, camping, sport hunting (in the Preserve), and sport fishing in an "untrammeled" setting. Again, we see that multiple experiences are pursued in the park, understood in multiple layers of meaning.

Figure 17. Map showing land status and wilderness designations.



TOURISM IN THE PARK

Lake Clark National Park and Preserve is not a park one can decide to drive to on a Sunday afternoon. There are no roads connecting the Park and Preserve to surrounding areas. Instead, visitors must plan their trips well in advance, and travel to the Park by one of several means. They might secure flight reservations to go to Port Alsworth, where the field office for Lake Clark Park and Preserve is located. Float planes can also land directly on lakes and rivers within the Park, or in bays off Cook Inlet. Additionally, visitors may travel by boat across Cook Inlet from the Kenai Peninsula.

Once they arrive, visitors may either camp in tents or stay in one of the lodges, rooms or cabins available in Port Alsworth or in park-related Resident Zone Communities. There are lodges in the villages of Iliamna, Nondalton, Pedro Bay, Igiugig, and Kokhanok, some of which provide easy access to Katmai National Park and Preserve as well as to Lake Clark National Park and Preserve. Most of the lodges remain open only in the summer months. There are four commercial lodges in Port Alsworth and four lodges located on the coast of Cook Inlet. Port Alsworth is a frequent launching-off point for backpacking, fishing, or sport hunting in the Preserve, but from wherever they are housed, visitors can fly in on a daily basis for hunting and fishing within the Park and Preserve. Local businesses provide a number of services including air taxi, backpacking, boating trips, bear viewing, charter boat, day hiking, big game transporting, mountaineering, photography, sport fishing and winter backcountry trips.[38]

Beyond the lodge or guided experience, visitors to Lake Clark National Park and Preserve have the opportunity to enjoy diverse ecosystems ranging from lakeshores to rugged mountains, and from grasslands to dense forests. They can see a variety of birds, fish, bears, sheep and many other species of wildlife that make their homes there. Visitors also may have occasion to interact with and learn something about both Native and non-Native residents of the Resident Zone Communities around and within the Park.

Inside the Park, there are a few established trails around the Port Alsworth area. Many backpackers, however, opt to make their way along open tundra through spectacularly beautiful country. Rafters or kayakers can be dropped in specific locations to start river trips on any of the three national wild rivers—the Mulchatna, Chilikadrotna, or Tlikakila Rivers—or on other riverways.

Visitors to Lake Clark National Park and Preserve are drawn to the area for the very reasons that make it somewhat challenging to manage and monitor: its vastness, ruggedness, and wildness. They value the opportunity to see wildlife in a variety of habitats, to enjoy undeveloped wilderness, to feel a sense of isolation, and to be far from urban concerns. Some visitors prefer to backpack through the region, exploring on foot. Others enjoy kayaking, rafting or canoeing on the rivers. Still others are drawn to the unique fishing opportunities this region of Alaska provides. Sport hunters, who are allowed to hunt only in the Preserve, seek their own experience of the wild, and hope for the opportunity to hunt for animals they may not encounter elsewhere.

Due to the size and geography of Lake Clark National Park and Preserve, its relatively small field staff, and the fact that there is not a single point of entry into the park, accurately tracking visitor numbers and activities is not possible. Numbers of total visits to the park and preserve annually are based on estimates, but range around 5,000-6,000 per year for the last five years, with numbers closer to 10,000 per year for the early to mid-1990s (http://inside.nps.gov/parks/detail). Numerous park staff have noted the need for improved tracking of visitor use, and a new system, which requires guides and air taxi operators to provide daily accounts of their commercial activities, is being developed. An additional solution might be to utilize Native liaisons in Resident Zone Communities to monitor visitor use from multiple entry points.

[38] There are approximately 66 commercial business providing services to visitors in Lake Clark, an estimated 75 percent of those business owners reside in Alaska year-round while 25 percent live in the Lower 48 during the winter (Becky Brock, personal communication 2007). Approximately 30 commercial operators reside in Port Alsworth, Iliamna, Kenai, Soldotna, Homer, Anchorage and the greater Anchorage area during the summer months.

Local residents also use Lake Clark National Park and Preserve for subsistence, recreational and other purposes. Subsistence activities within Lake Clark National Park and Preserve, as discussed in detail in previous chapters, include hunting, trapping and fishing; gathering berries, bark and other forest products; and wood cutting. Hunters generally follow the subsistence regulations outlined by the Federal Subsistence Board which provide limits in terms of seasons and days for harvesting as well as numbers of animals harvested.[39] In addition to these regulations, those hunting for sheep, bears or out of season moose (for potlatch, for example), also need special permits. For subsistence fishing, people consult regulations outlined by the Alaska Department of Fish and Game, in conjunction with the Federal Subsistence Board. Park Rangers monitor subsistence activities within the park and preserve. Many residents also hunt on their own allotments of land and on public lands all around the park and preserve.

Other activities in the Lake Clark National Park and Preserve area include a variety of research projects by previous and current NPS staff. The National Park Service seeks to identify, monitor and protect natural and cultural resources within the park. All of these various activities in the park are captured in the park mission statement: ..."to preserve and protect the park's natural and cultural resources while providing for traditional use, inspiration, recreation, subsistence, recreational use and scientific study for the enjoyment and benefit of current and future generations" (Lake Clark National Park and Preserve Mission Statement, NPS website, http:/www.nps.gov/lacl/index.htm).

POTENTIAL FOR USER CONFLICT

Although the park area is vast, and the opportunities for enjoying it are many, there are some issues around which users may run into tension or conflict. Such tensions and conflicts are important for park managers to bear in mind. Some of the problem areas revolve around fishing and hunting, for purposes of both subsistence and sport. Sport hunters, for example, spend thousands of dollars to fly in to remote regions in Alaska to trophy hunt. Their goal is not necessarily to get needed meat, but to acquire a "rack" of moose or caribou horns, or the fur of black or brown bear. The values that sport hunters may bring to their experience, or their understanding of the wilderness environment around them, including their relationship to the animals they are hunting, can be very different from the worldviews held by subsistence users. Many Dena'ina people still say that animals offer themselves in the hunt and that, if they are hunted properly, the animals will continue to be available in the area. Some Dena'ina people suggest that the fly-in hunt is completely contrary to their own views on hunting and subsistence. They also believe that the high number of animals taken by sport hunters—especially big bull moose—contributes directly to the reduction of animals available for subsistence hunting. Some Dena'ina people believe that the noise of the many airplanes flying the hunters in and out, and the constant boat traffic, lead to disturbance that drives animals further away, and negatively affects fish in the waters (Nondalton Group Interview 2004). Nondalton residents have been especially critical of fly-in drop-off hunting without guides. Guides, they suggest, especially local ones, could help monitor or direct hunters' choices and actions.

Some sport hunters do not keep the meat of animals they kill, or they may take a few choice cuts, rather than paying for the expense, by weight, of transporting it out. Meat from such sport hunts is sometimes shared with members of the nearest village, or with a guide or others who assisted on the hunt. Still, there are times when meat is left in the woods, at runways, or in dumpsters where it rots and is wasted. Wanton waste of game animal meat is against the law. In cases where it is given to local people, this exchange may be somewhat uncomfortable. Local people may be willing to accept the "donation meat" from sport hunters' kills, to keep it from being wasted, but they largely would prefer to hunt their own animals. Likewise, when sport fishers spend large sums of money to come in to catch and release salmon, trout or other fish, it seems a strange undertaking to many local people. Dena'ina people jokingly refer to catch and release fishing as "playing with your food," but they also see this approach to fishing as disrespectful, harmful to the fish, and resulting in unintended death of fish. Andrew Balluta notes,

[39] These are available in annually updated booklets, or online at alaska.fws.gov/asm/home.html.

> You see dead fish floating down in Newhalen (River) from sport fishing. The fish don't just die because they want to....When they catch and release, a lot of them die. You know, if you catch a fish in the gills they are dead. (Stickman et al. 2003:34)

Whether these sport hunters or catch-and-release fishers are resident Alaskans or from out-of-state, some local people feel that the trophy approach does not reflect a set of ideals and ethics that is rooted in the land, as Dena'ina practices are. Yet many sport hunters and fishers believe they follow a conservation ethic. While there may be relatively few overt clashes between these user groups, the different approaches can contribute to a climate of tension, hostility and resentment. It is important to remember that the situation is not simply a matter of Dena'ina subsistence hunters versus non-resident trophy hunters. There are many other rural subsistence users in the park and preserve besides Dena'ina. In addition, Dena'ina and other Alaska Natives contribute to the sport hunting and fishing industry by serving as guides, pilots, lodge employees, boat operators, or other service providers in support of the sport hunt or fishing experience.

This is not a new development. Dena'ina men have served as guides to sport hunters for many decades (Macy Hobson 1986).[40] One of the earliest known such guided hunt trips was when Gabriel Trefon guided Colonel A.J. Macnab and Frederick Vreeland up Gladiator Basin on a hunt for Dall sheep in the Lake Clark area in 1921 (Branson 1997).

Photo 44. Gabriel Trefon with Macnab's two Dall sheep at Gladiator Basin (Branson 1997:49). NPS photo H760, courtesy of Sandra Orris.

[40] Macy Hobson had guided in 1936 then decided to never do it again because it was too difficult.; Nickoli (Harry) Balluta said he had guided before and then decided to not support it (N. Balluta 2004) .

In a unique collaboration in the 1950s and 1960s, Andrew Balluta and other Dena'ina men served as "gunners," shooting wolves, wolverines and other animals for bounty hunters from small aircraft. Participation in a cash economy has been part of the Dena'ina experience since the late 1890s. However, even while Dena'ina men may appreciate the opportunity to work, or to guide hunters for a more responsible hunt experience, inherent differences in world view are still at play. The contradictions and complexities inherent in these cultural interactions—and the potential for conflict—persist today.

A number of people come to Lake Clark for bear viewing. While this is a unique opportunity to enjoy wildlife in Lake Clark National Park and Preserve, it is another area of potential user conflict. Silver Salmon Creek and Shelter Creek, both draining into the Cook Inlet, are areas of relatively easy access where bear viewing is possible. Some complications arise with regard to NPS jurisdiction along shorelines. The National Park boundary extends to mean high tide, a line literally drawn in the sand by the tidewaters. Below mean high tide is a small strip of beach that comes and goes with the tide. Visitors typically come to Chinitna Bay and Tuxedni Bay, and their contiguous shorelines, during low tide. Thus, their boats or planes land on a strip of land that is outside of NPS jurisdiction. This can be a problem if they do so without a commercial use authorization issued by the National Park Service, or if bear hunters simply wait for bears to cross what is (especially to the bears) an invisible line at mean high tide.

COMPATIBLE AND COMPETING IDEAS AND USES

Through all of these different activities played out in the park—hunting, river running, hiking, fishing, berry picking—people are operating on a wide variety of ideas and assumptions about park lands, and how they can and should be used. These ideas and assumptions are based on the various systems of meaning that have been laid over the landscape of the Lake Clark area. In the introduction of this study, we considered different ideas about wildness and wilderness, and how and why parks were formed. We also noted the many deep ties that generations of Dena'ina and Yup'ik peoples have to the region. When a place that has been long inhabited is designated as a park or as a wilderness, we sometimes—perhaps inevitably—find contradictory perspectives, or a clash of ideals. Visitors may need to broaden their understanding of wilderness to include human use of an area historically and contemporaneously.

The various users of what are now park and preserve lands have some features in common as well as areas of conflict. The things Dena'ina people deeply value and enjoy about their homelands—the routes they travel by foot, dog team or snow machine, the hunting, trapping and fishing areas to which they relocate for harvest seasons, and the fondness they have for being out in these seasonal camps—are not necessarily so different from the openness and quiet, the smells and sounds, that a backpacker or river runner seeks. For the Dena'ina, attachment to the land has meant broad inhabitation. People may have homes in village settlements, but for big parts of the year, they literally get out and live on the land. Many say that getting out to camp is their favorite time of the year—what they yearn for. Moreover, people's movements across and living upon the landscape are shaped by long-term associations with the area. Stories are passed down, place names encode past events, and the landscape is alive with history and significance with direct relevance to their long-term occupation of the area. Although Dena'ina may not be in search of the same sense of "solitude" or "remoteness" as some park visitors, users from all backgrounds may share an appreciation for the spectacular mountainous terrain of the region, the clear rivers and lakes, and the beauty and abundance of wildlife. The various visitors have an overlapping, not mutually exclusive, range of appreciation.

MANAGEMENT IMPLICATIONS

In light of these different perspectives and layers of significance, as well as their intersections and commonalties, it is important to consider implications for management. Resident Zone Communities (listed in CFR 36: 13.70(a)(1)), as well as those who may have an association with the Park but are not officially listed as such, are stakeholders who are closest to the park lands: geographically, symbolically, and in terms of livelihood. Their voices should be valued and given priority in management decisions. These park neighbors, both Native and non-Native, are those who have much at stake in park decision-making. They are also the people most likely to maintain a strong, long-term sense of stewardship and responsibility toward park lands.

The communities associated with the Park also have the most to lose, should something threaten resources within or around the parks. At the time of this writing, Northern Dynasty Mines, Inc. is evaluating an area just eighteen kilometers west of Nondalton for a large-scale open pit gold and copper mine. There are mixed responses among communities in the rural areas that would be affected by the mine development. Some people welcome the opportunity for jobs and income to come into the area. Others are more concerned about long-term environmental and social impacts of such large scale development in what is now a fairly undeveloped area. Subsistence, many fear, would be permanently compromised, and the fisheries perhaps irretrievably damaged. Northern Dynasty is just one prospector among many other companies which hope to ride on the infrastructure that would need to be developed: a road, a port, an energy source, a means to transport out the ore, and so on. Many residents of neighboring Dena'ina and Yup'ik communities are deeply alarmed at the potential effects of these undertakings.

Besides the questions raised by the potential mines, ongoing adjustments to regulations and policy related to subsistence, sport and commercial access to fish and wildlife continue. Some local residents expressed the sense that the money generated by sport and commercial hunting and fishing drove decision-making. Despite the priority of subsistence over sport hunting and fishing that is built into the ANILCA legislation, some people have voiced the sentiment that their voices are not heard in important decision-making related to the management of fish and wildlife resources.

> There have been a lot of studies done and a lot of money is spent on documenting subsistence resource use—harvests, how much we eat, how many people live in our homes, how much money we make and so on—that's really putting us under the microscope. Researchers get the data they need to satisfy their programs and discard the other concerns. For example, subsistence users are continually saying that sport hunting and fishing are affecting the subsistence resources—especially caribou and moose. The increasing numbers of motorized boats and planes are scaring the animals away. These observations continually get documented, but with no action. State and federal managers need to start addressing these other issues that are coming up again and again. (Karen Stickman 2005:26)

With regard to Lake Clark National Park and Preserve subsistence policy and regulation, planning, development of interpretive material, research, and policy development and implementation, it is key to listen to our park neighbors.

How can we, as park managers account for these many uses of the park and preserve areas, or these many layers of significance? We can, through our ethnohistories, ethnographic overview and assessments, place name studies, traditional use studies, special emphasis studies and so on, document those rich and complex meanings. As cultural resource managers, we respond to policy that directs us to identify and protect people's associations to park areas, whether as cultural or ethnographic landscapes or as traditional associated places, and to identify ethnographic resources that are also park of the park lands. Importantly, however, we cannot simply hold up Dena'ina meanings of, say, 250 years ago, as the "traditional" or even the primary ones. That would not be true to even the present-day

Dena'ina experience of their homelands. The equation must consider that they now drive ATVs and snowmobiles, fly planes, use rifles, speak English, watch TV, along with myriad other new cultural characteristics.

Dena'ina are the best spokespersons for their own experiences, and consultation processes are in place for communicating regularly and meaningfully with these park residents. A Community Contacts Guide is available to help direct interested parties to the relevant entities at the village and tribal level.

Subsistence practices—even as they have radically changed—also represent a strong strand of the connections Dena'ina have with the land over many, many generations, and this should be recognized and respected. Dena'ina language and culture is enjoying a strong wave of revitalization. The language they learn, the culture they claim, and the identities they craft, are new incarnations of traditions practiced in the past.

Park ethnographers and other cultural resource managers aim to recognize these traditions as well as those of Euroamericans who have lived for several generations in Port Alsworth, or diverse communities in Pedro Bay and Newhalen. In collaboration, park anthropologists and residents of these communities can work to document, honor and preserve this variety of uses, meanings and associations to the Lake Clark area.

Russian Orthodox cross in a graveyard at the site of old Stuyahok village, along the Mulchatna River. Photo by Erin McKittrick.

CHAPTER NINE

Assessment and Recommendations for Further Research

RECOMMENDATIONS

The project that produced this Ethnohistory was comprised of multiple components, which served to maximize our ability to take stock of ethnographic information available for the Lake Clark area. A Cooperative Agreement with the Alaska Department of Fish and Game, Subsistence Division, meant that anthropologists James Fall and Ron Stanek who have a long history of interaction with the community of Tyonek, and along with Davin Holen who specialize in the area of subsistence hunting and fishing, could apply their expertise and experience in the writing of the West Cook Inlet Ethnographic Overview and Assessment. That study was done in conjunction with this Ethnohistory, and the data it provides on the West Cook Inlet settlements informs and complements this broader report (see Stanek et al. 2007). An anticipated third volume, referenced by Donald Callaway in his section on subsistence practices in Chapter 5, will describe and analyze subsistence activities and economic change in more detail.

Concurrently, James Kari has conducted an exhaustive search of existing recordings with Dena'ina people, in Dena'ina or English, and entered them into a database, the Dena'ina Audio Collection. This database is available through the Lake Clark National Park and Preserve office. We can now easily determine the location of particular recordings, and we have a good sense of what those recordings contain, where and by whom the interviews were conducted, and the condition of the recording. A bibliography compiled by R. Greg Dixon on the Dena'ina and the Cook Inlet area has been updated by James Kari, Alan Boraas and others, and is available at *Qenega.org*.

This Ethnohistory for the greater Lake Clark National Park and Preserve area has drawn from valuable cultural information in the form of oral histories; archeological, historical and ethnographic studies; and early travel and trade accounts through the Lake Clark region. In this regard, we have many valuable historical and ethnographic resources for the area. However, some of these (such as Ellanna and Balluta 1992, Ellanna 1986, and Johnson et al. 1997) are a bit hard to find. The National Park Service and its partners may want to support the reprinting and greater distribution of some of the resources already in existence and continue to make them available on the internet (e.g. qenaga.org/archives/docs/T1992EB1992).

These sources and many others show a long and continued use of and association with the Lake Clark National Park and Preserve area by Dena'ina people, some Yup'ik people, Russian immigrants, and Euroamericans over the last several centuries. These layers of cultural significance reflect a rich cultural heritage for the lands in and around the Park and Preserve. In addition to its wilderness qualities, Lake Clark National Park and Preserve embodies a complex mix of cultural history and contemporary use.

National Park Service policies outline the many ways we can identify and protect objects, places, languages, and many other culturally significant resources. The Cultural Resource Management Guidelines identify several cultural resource types: cultural landscapes, archeological resources, structures, museum objects and ethnographic resources (NPS 1998). While all of these categories have relevance to an ethnohistorical study, cultural landscapes and ethnographic resources are the most immediately relevant. Cultural landscapes and ethnographic resources may not always be as visible and tangible, but are perhaps most centrally significant to contemporary populations.

> Ethnographic resources are basic expressions of human culture and the basis for continuity of cultural systems. A cultural system encompasses both the tangible and the intangible. It includes traditional arts and Native languages, religious beliefs and subsistence activities. Some of these traditions are supported by ethnographic resources: special places in the natural world, structures with historic associations, and natural materials.... Management of ethnographic resources acknowledges that culturally diverse groups have their own ways of viewing the world and a right to maintain their traditions. (NPS 1998, Ch.1:3-4)

Ethnographic resources are identified and assessed based on people's sense of connection to them, and the level of significance the places, objects, species or meaning systems may have for people. Many of the ethnographic resources of central importance to Dena'ina and other residents of the Lake Clark area have been documented through studies of native plants, birds, fish and other resources. The oral history records should be reviewed to learn more about performative elements such as storytelling, song, and dance in Dena'ina culture. A systematic review of recordings might also produce a better understanding of religious and spiritual beliefs.

As mentioned above, two Cultural Landscapes Inventories have been completed for Lake Clark National Park and Preserve (Ferreira 2006). One documents the Kijik Archeological District, while the other documents historical use of the Telaquana Trail, which connected people from the Lake Clark area to hunting, fishing and travel grounds, as well as to other communities at Telaquana Village, the Mulchatna area, and Tyonek and other coastal settlements. Planning and research have begun on the Chulitna River-Sixmile Lake Dena'ina Cultural Landscape. In the early twentieth century the subsistence "bread basket" of the lake Clark Dena'ina shifted from Kijik-Lake Clark to an area nearer Nondalton, the Chulitna River-Sixmile Lake district. For the past 100 years the people of Nondalton have largely derived their subsistence fish, game, and water fowl from the Chulitna River-Sixmile Lake drainages. These Cultural Landscape Inventories are valuable for documenting the richness of cultural occupation in and across these areas. In addition to these, some areas that should be considered for Cultural Landscapes studies include:

- Tanalian Point, a historic settlement area on the shores of Lake Clark where Dena'ina people displaced from Kijik and other areas were joined by American gold prospectors and traders in the early 1900s.
- Old Nondalton and the contemporary town of Nondalton, together a cultural center for Dena'ina families and an important link between the Lake Clark communities and the Iliamna communities.
- "Proenneke's world": the areas all around Twin Lakes and Turquoise Lake that Dick Proenneke traveled and knew so well, including specific trails that he used and documented in his writings.
- The Telaquana Village (Old Village) site southwest of Telaquana Lake, on the Telaquana River where Dena'ina house sites are still visible on the landscape. This was an important village site that is quickly being covered over with forest growth.
- The Port Alsworth area, and its unique cultural and religious history.
- All of Lake Clark and its shores and waters, which have been traveled and used by Dena'ina and other peoples for many generations.

CURRENT RESEARCH

Fortunately, an ongoing, rigorous research agenda has been dedicated to the cultural and natural resources of Lake Clark National Park and Preserve. A few of those current studies relating to cultural resources are as follows:

- A four-year archeological survey was completed in 2005, and a final report summarizing the work of this project is forthcoming. This will offer an overview of some of what we are learning about prehistoric and historic occupation in the greater Lake Clark region.
- Another archeological survey has been taking place just outside the park boundaries in the Mulchatna River area (Branson et al. 2003; Branson 2002). The survey focuses on locating Dena'ina settlements referred to in oral histories, which may provide more evidence for movement and origins of Dena'ina people. This research

also helps to fill gaps in our understanding of who lived in the region, and when, and what some of their technologies and cultural practices were.

- A team of researchers from the University of Alaska Anchorage aim to conduct an interdisciplinary study in the Lake Clark area that will shed some light on long-term geological and climatic changes, the presence of salmon, and the use of salmon by people. This study will also help to fill in information about the long-term occupation of the area (Heiser 2003). We are steadily gaining more information about early people's occupation of this area, and the knowledge and meaning systems they developed.

- Additionally, as a follow-up to this Ethnohistory, the National Park Service has initiated a Place Names and Landscapes Stories project for the Lake Clark area. This project documents place names and landscape stories for the regions in and around Lake Clark National Park and Preserve, adding another dimension to the ethnographic information documented here. Through the place names project, we have entered all of the names that have been previously recorded by earlier researchers into a database. We will gather new names and related stories, and generate a cultural atlas and interactive maps. Especially in light of imminent major changes to the environment with the start-up of the Northern Dynasty Pebble Copper Gold Mine, it is more urgent than ever to capture as much detail as possible about the cultural significance of this region.

- On a very positive and hopeful note, much more work is being done in the direction of Dena'ina language and cultural revitalization. Students of the Dena'ina language are fortunate that careful studies on Dena'ina language and word usage have been compiled, and many oral histories recorded (Kari and Fall 2003; Kalifornsky 1991; Kari and Russell Kari 1982; Kari 1977). The Alaska Native Language Center at the University of Alaska Fairbanks is creating digital access to Dena'ina materials housed there. The center maintains a comprehensive collection of nearly everything written in or about the Dena'ina language. The Dena'ina Archiving, Training, and Access (DATA) project has been making all of these materials more accessible. The result will be a searchable archive of texts and recordings which can serve as an additional resource for those wishing to learn more about Dena'ina language and culture. Additionally, the Center's website for Dena'ina language, which offers simultaneous audio and print translations of Dena'ina texts, is a powerful instrument for teaching the language (http://qenaga.org/index.cfm).

In 2004, both the Alaska Native Heritage Center and the Kenaitze Indian Tribe received multi-year grants to develop curricular materials for teaching Dena'ina.[41] These two initiatives coordinated with one another, with the Alaska Native Language Center, and with other agencies and individuals conducting ethnographic research in the area, to develop materials in Dena'ina and English on Dena'ina language and culture.

These developments mean that a new swell of interest in the study of Dena'ina language is being supported by the careful development of curricular materials, including new recordings with Dena'ina elders.

FURTHER STUDY

- While we have a rich collection of oral histories and interviews with Dena'ina elders dating back several decades, many of these recordings exist only on tape, or only as transcripts, with no digital audio or electronic text. These materials need to be scanned, indexed, and entered into a searchable database so their contents are more easily accessible. Audio recordings on cassette tapes should have back-ups in digital format.

[41] The Alaska Native Heritage Center received a grant from the Department of Education; the Kenaitze Indian Tribe received funding from the Administration for Native Americans through the Department of Health and Human Services.

- We have extensive recordings with some elders telling their life histories, place names, and many activities on the land. It would be good to compile some of these, and to produce biographical profiles of some elders. This would be a good way to get the material out of the archives and consolidate it into some modest products that people could keep. Such biographies would not only commemorate the lives of elders, but offer important details on Dena'ina lifeways for the benefit of younger generations.

- Anticipating what may be much bigger waves of tourism in the Lake Clark National Park and Preserve area, it is important for people in Resident Zone Communities to help shape interpretive material and visitor experiences. For example, local people could develop maps and brochures, or organize cultural events that tourists could attend. Such activities would require coordination between National Park Service interpreters and ethnographers and cultural groups from the communities. It is equally important to document the impact of tourism—including sport fishing and hunting—on communities of this area.

- Another important area for further research relates to Dena'ina youth and other young people in the region. Younger generations are seeing a great deal of cultural change. The elements that formed the core of their parents' and grandparents' identities—such as subsistence hunting and fishing, continual traveling over the land, and a detailed knowledge of natural resources—may no longer be available to young people of today. An examination of their identity formation in the midst of a rapidly changing culture could offer an important tool for them to consider the steps they must take to build community and identity. Events like culture camps in the summer contribute strongly to community building and identity formation; the work being done at culture camps needs to be documented as well.

Photo 45. Helen Dick of Lime Village shares dried salmon with Michelle Ravenmoon, who in turn promised Helen some frozen blueberries. Sharing is a constant part of life for Dena'ina people, and it ensures that even those unable to hunt to gather resources may have access to them. Younger people, and those who are particularly skilled at hunting, gathering, and processing, take seriously a commitment to help provide for their families, especially elders. Karen Gaul photo.

- An interesting issue that we were not able to address fully here is that of gender roles among the Dena'ina, both in the past and in contemporary times. As with all other elements of Dena'ina culture, gender roles are in a constant process of change. Research is needed to go systematically through existing oral histories, ADF&G Division of Subsistence research reports, and other ethnographic studies of the area, to consolidate information on how women and men are socialized, what work they have performed and continue to do, and how they view their changing worlds.

BUILDING RELATIONSHIPS

The above ideas for further research have been generated through ongoing discussions with Dena'ina people in village meetings, in the Lake Clark National Park and Preserve offices in Anchorage, at language workshops and in casual conversations. These conversations should continue to inform the ethnographic research agenda for the National Park Service. This Ethnohistory has benefited greatly from the input, stories, knowledge and wisdom of many Dena'ina people, including those who currently live in the area, those who have moved away to Anchorage or elsewhere, and those who have passed on, but have left their words with us. To whatever degree possible, Dena'ina voices should guide, participate in, and monitor future research. Collaborative research should be the model for all cultural research in the Lake Clark area.

Collaboration with Dena'ina people and other park neighbors also requires coordination within the National Park Service. In this regard, NPS staff in the areas of interpretation, subsistence, ethnography, history and archeology, as well as those working in natural resources, should continue to work together to coordinate their efforts. Together, Dena'ina, other residents of the park communities, and park staff can think about how to jointly manage for heritage development, and improve interaction with a visiting public.

An additional issue around which there could be more coordination is that of subsistence. ANILCA passed twenty-five years ago. The legislation has meant a radical new kind of administration of national parks and preserves in Alaska, with Native people serving on Regional Advisory Councils, and helping to shape the direction of managed subsistence in the park area. The subsistence management process is complicated and cumbersome, and full understanding of it is challenging, even by their own accounts, for even the most diligent of users and enforcement personnel. Subsistence management and subsistence use in the park and preserve deserve careful reexamination in terms of basic efficacy, fairness and feasibility.

Photo 47. Rose Hedlund of Chekok, in 1960 prepares to skin a fresh water seal from Lake Iliamna. NPS photo H1009, courtesy of Rose Kinney Hedlund.

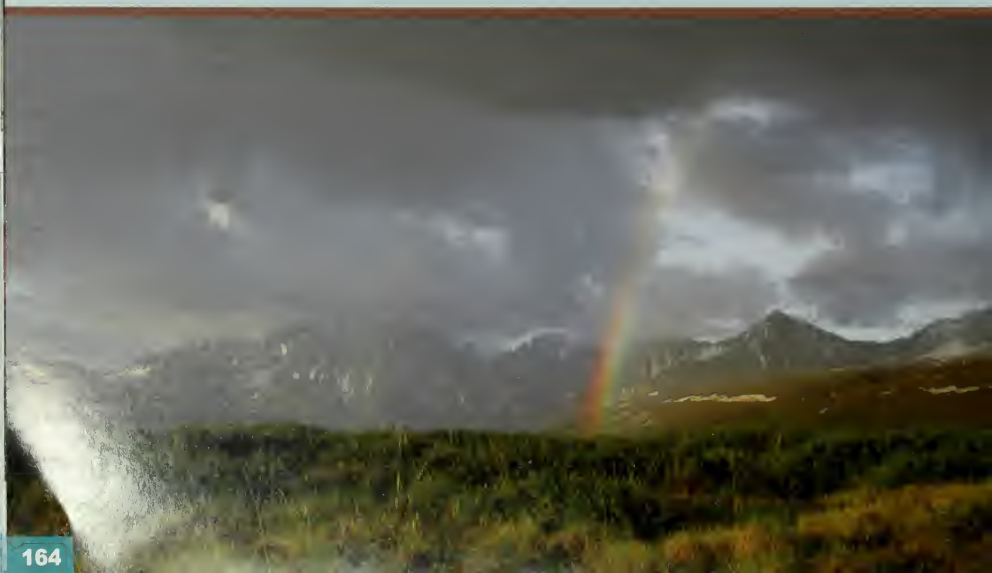
Northern Dynasty's Pebble Copper/Gold Mine may include the largest open-pit mine and underground workings in North America, and inhabit a 540 square mile mining district just to the north of Lake Iliamna, southwest of Lake Clark National Park and Preserve. The proposed mining effort will contribute to the region a new energy source, a new port development on Iliamna or Iniskin Bay, and a road connecting Cook Inlet to the interior area. The project will also include a large holding pond to contain the tailings from the mine. The mine would employ a large number of people, many of whom will reside in the mining district area. These developments will impact the Resident Zone Communities of Lake Clark National Park and Preserve, particularly those in the Iliamna and Lake Clark areas. Inland areas will be accessible by road. The mine project threatens to radically change the visual environment, compromise habitats and populations of fish, birds, and other wildlife in the area, introduce air and water contaminants, diminish ground water quality and quantity, and to have profound effects on the communities in this region. Additionally, the development area is very close to the Lake Clark National Park and Preserve boundary. Changes to the greater surrounding environment will necessarily alter the face and attractiveness of the park to outside visitors.

Study of the impact of the mining endeavor on local communities is being conducted only in relation to subsistence and economic activities. Limited research is being done to assess community disturbance as a result of the mine. It would be valuable to monitor and assess people's responses to the mine before, during and following its establishment would be valuable. Documenting the potential and actual impacts of the mine should be a research priority.

While not all of these ideas for future research can be pursued at once, because there is such high current interest in Dena'ina language and culture, important work continues from a number of different fronts simultaneously. Much of this work can be coordinated. Interviews for the place-names project, for instance, can potentially focus on the particular areas that will be altered by the mine development.

Park ethnographers and other cultural resource managers aim to recognize Dena'ina traditions as well as those of Euroamericans who have lived for several generations in Port Alsworth, or diverse communities in Pedro Bay and Newhalen. In collaboration, park anthropologists and residents of these communities can work to document, honor and preserve this variety of uses, meanings and associations to the Lake Clark area.

Photo 46. Rainbow against Telaquana mountain. Karen Gaul photo.



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INTERVIEWS AND ORAL HISTORIES

It is important to note that a rich legacy of hundreds of recordings of Dena'ina people is stored in a number of collections including Lake Clark National Park and Preserve (LACL), the Alaska Native Language Center, and the Bureau of Indian Affairs, among others. Excerpts selected for this study represent only a small sampling of the oral histories available. Because of different cataloging systems and notation, it is difficult to construct a standardized reference format. Here name of speaker, date of recording, and as much relevant information as possible are included.

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Trefon, Gabriel

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Trefon, Mary Ann

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GPO U.S. GPO: 2007 — 679-514 / R6191 Region No. 10

The Groundhog Mountain (Qiyhi Dghil'u, "marmot mountain") area has long been an important place for hunting, trapping and fishing. In the timber, near the mountain it was a particularly good area for camping according to elder Nickoli Balluta. "We live off the land - subsistence. Live off the fish..., berries, meat, everything that grows wild, everything." (Nondalton elder Gladys Evanoff). Photo courtesy of Erin McKittrick.